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     (FILE 'HOME' ENTERED AT 13:42:36 ON 15 FEB 2005)
               SET COST OFF

     FILE 'REGISTRY' ENTERED AT 13:42:48 ON 15 FEB 2005
L1         34149 S K[LR][YF]D/SQSP

     FILE 'REGISTRY' ENTERED AT 13:48:10 ON 15 FEB 2005
L2          4845 S L1 AND SQL<=209
L3          1518 S K[LR][YF]D.{0-12}^/SQSP
L4          1337 S L3 AND L1
L5           689 S L2 AND L4
               SAV L5 HOPE753/A

     FILE 'HCAPLUS' ENTERED AT 13:51:11 ON 15 FEB 2005
L6           405 S L5
L7             3 S US20040138127/PN OR US2004-753646#/AP,PRN
               E DAVIDSON D/AU
L8           102 S E3,E13
               E DAVIDSON DON/AU
L9            62 S E3,E5,E6,E12,E13
               E WANG J/AU
L10          270 S E55-E60
               E WANG JI/AU
L11           94 S E3,E18
               E WANG JIE/AU
L12          648 S E3
               E WANG JIEYI/AU
L13           40 S E3
               E GUBBINS E/AU
L14           31 S E3,E4,E6,E7
               E ABBOT/PA,CS
L15         9014 S E3,E4 OR ABBOT?/PA,CS
L16            3 S L6 AND L7
L17            7 S L8-L15 AND L6
L18            7 S L16,L17
L19           45 S L6 AND (PD<=19960503 OR PRD<=19969593 OR AD<=19960503)
L20            4 S L18 AND L19
L21            3 S L18 NOT L20
L22            7 S L20,L21
               E ANGIOGEN/CT
               E E4+ALL
L23        14221 S E5+NT
L24         1247 S E24,E32,E33,E42,E43,E49,E50
L25         5603 S E59
               E E63+ALL
L26         3153 S E3,E4,E2+NT
L27            6 S L19 AND L23-L26
L28            7 S L19 AND ?ANGIOGEN?
L29            0 S L19 AND ?NEOVASCULARIS?
L30            0 S L19 AND ?NEOVASCULARIZ?
L31            0 S L19 AND ?VASCULARIZ?
L32           10 S L22,L27,L28
L33           38 S L19 NOT L32
L34            3 S L33 AND PLASMINOGEN
L35            8 S L32 AND PLASMINOGEN
L36           13 S L32,L34,L35
               SEL HIT RN

     FILE 'REGISTRY' ENTERED AT 14:01:01 ON 15 FEB 2005
L37           51 S E1-E51
L38           51 S L37 AND L5
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SAV L38 HOPE753A/A

=> fil hcaplus
FILE 'HCAPLUS' ENTERED AT 14:01:35 ON 15 FEB 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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FILE COVERS 1907 - 15 Feb 2005 VOL 142 ISS 8
FILE LAST UPDATED: 14 Feb 2005 (20050214/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d l36 all tot

L36 ANSWER 1 OF 13 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:176555 HCAPLUS
DN 140:229440
ED Entered STN: 04 Mar 2004
TI **Antiangiogenic** peptides derived from mammalian protein kringle 5 and use for treating **angiogenic** diseases
IN **Davidson, Donald J.**
PA **Abbott Laboratories, USA**
SO U.S., 47 pp., Cont.-in-part of U.S. Ser. No. 851,350.
CODEN: USXXAM
DT Patent
LA English
IC ICM A61K038-00
NCL 514012000; 514002000; 514013000; 514014000; 514015000; 514016000; 514017000; 514018000; 514648000; 514336000
CC 1-8 (Pharmacology)
Section cross-reference(s): 3, 6, 13
FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	US 6699838	B1	20040302	US 1997-924287	19970905	<--
	US 5801146	A	19980901	US 1996-643219	19960503	<--
	US 5981484	A	19991109	US 1997-832087	19970403	<--
	US 6057122	A	20000502	US 1997-851350	19970505	<--
	US 2004138127	A1	20040715	US 2004-753646	20040108	<--
PRAI	US 1996-643219	A2	19960503	<--		
	US 1997-832087	A2	19970403			
	US 1997-851350	A2	19970505			
	US 1997-924287	A1	19970905			

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 6699838	ICM	A61K038-00
	NCL	514012000; 514002000; 514013000; 514014000; 514015000; 514016000; 514017000; 514018000; 514648000; 514336000

US 6699838 ECLA C12N009/68 <--
US 5801146 ECLA C12N009/68 <--
US 5981484 ECLA C12N009/68 <--
US 6057122 ECLA C12N009/68 <--
US 2004138127 ECLA C12N009/68 <--

AB The invention provides mammalian kringle 5 fragments and kringle 5 fusion proteins as a compds. for treating **angiogenic** diseases. The invention also provides methods and compns. for inhibiting **angiogenic** diseases.

ST **antiangiogenic** peptide human protein kringle **angiogenesis**

IT **Angiogenesis inhibitors**
Human
Protein sequences
(**antiangiogenic** peptides derived from mammalian protein kringle 5 and use for treating **angiogenic** diseases)

IT Peptides, biological studies
RL: BPN (Biosynthetic preparation); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(**antiangiogenic** peptides derived from mammalian protein kringle 5 and use for treating **angiogenic** diseases)

IT Fusion proteins (chimeric proteins)
RL: BPN (Biosynthetic preparation); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(k5; **antiangiogenic** peptides derived from mammalian protein kringle 5 and use for treating **angiogenic** diseases)

IT Protein motifs
(kringles; **antiangiogenic** peptides derived from mammalian protein kringle 5 and use for treating **angiogenic** diseases)

IT **666829-12-5P 666867-41-0P** 666867-42-1P 666867-43-2P
RL: BPN (Biosynthetic preparation); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(**antiangiogenic** peptide sequence; **antiangiogenic** peptides derived from mammalian protein kringle 5 and use for treating **angiogenic** diseases)

IT 666870-06-0 666870-07-1 666870-08-2 666870-09-3 666870-10-6
666870-11-7, 8: PN: US6699838 SEQID: 8 unclaimed DNA 666870-12-8, 9: PN: US6699838 SEQID: 9 unclaimed DNA 666870-13-9 666870-14-0 666870-15-1
666870-16-2 666870-17-3 666870-18-4 666870-19-5 666870-20-8
666870-21-9 666870-22-0 666870-23-1 666870-24-2 666870-25-3
666870-26-4 666870-27-5 666870-28-6 666870-29-7 666870-30-0
666870-31-1 666870-32-2 666870-33-3 666870-34-4
RL: PRP (Properties)
(unclaimed nucleotide sequence; **antiangiogenic** peptides derived from mammalian protein kringle 5 and use for treating **angiogenic** diseases)

IT 666870-05-9 **666870-35-5 666870-36-6**
666870-37-7 666870-38-8 666870-39-9
RL: PRP (Properties)
(unclaimed protein sequence; **antiangiogenic** peptides derived from mammalian protein kringle 5 and use for treating **angiogenic** diseases)

RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

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L36 ANSWER 2 OF 13 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:99288 HCAPLUS
DN 140:331802
ED Entered STN: 06 Feb 2004
TI Lysyl 4-aminobenzoic acid derivatives as potent small molecule mimetics of **plasminogen** kringle 5
AU Sheppard, George S.; Kawai, Megumi; Craig, Richard A.; **Davidson, Donald J.**; Majest, Sandra M.; Bell, Randy L.; Henkin, Jack
CS **Abbott Laboratories, Global Pharmaceutical Research and Development, Abbott Park, IL, 60064, USA**
SO Bioorganic & Medicinal Chemistry Letters (2004), 14(4), 965-966
CODEN: BMCLE8; ISSN: 0960-894X
PB Elsevier Science B.V.
DT Journal
LA English
CC 1-3 (Pharmacology)
Section cross-reference(s): 34
OS CASREACT 140:331802
AB Kringle 5, a proteolytic fragment of human **plasminogen** has been shown to potently inhibit angiogenesis. The tetrapeptide KLYD derived from kringle 5 has been shown to capture many activities of kringle 5 in vitro. Further simplification has been achieved by replacement of the two central amino acids with a 4-aminobenzoic acid spacer group. Mols. displaying the required recognition groups on this core show similar in vitro properties to kringle 5, and are able to displace radiolabeled protein from a high affinity binding site on endothelial cells.
ST lysyl aminobenzoic acid deriv prepn **plasminogen** kringle mimetic angiogenesis
IT Blood vessel
(endothelium; preparation of lysyl 4-aminobenzoic acid derivs. as potent small mol. mimetics of **plasminogen** kringle 5 that inhibit HMVEC chemotaxis)
IT Protein motifs
(kringles; preparation of lysyl 4-aminobenzoic acid derivs. as potent small mol. mimetics of **plasminogen** kringle 5 that inhibit HMVEC chemotaxis)
IT Angiogenesis inhibitors
Chemotaxis
Human
Peptidomimetics

Structure-activity relationship
(preparation of lysyl 4-aminobenzoic acid derivs. as potent small mol. mimetics of **plasminogen** kringle 5 that inhibit HMVEC chemotaxis)

IT Endothelium
(vascular; preparation of lysyl 4-aminobenzoic acid derivs. as potent small mol. mimetics of **plasminogen** kringle 5 that inhibit HMVEC chemotaxis)

IT 9001-91-6, **Plasminogen**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(preparation of lysyl 4-aminobenzoic acid derivs. as potent small mol. mimetics of **plasminogen** kringle 5 that inhibit HMVEC chemotaxis)

IT 250789-27-6P 250789-59-4P 250789-78-7P 250789-79-8P
679784-35-1P 679784-36-2P 679784-37-3P 679784-38-4P
RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of lysyl 4-aminobenzoic acid derivs. as potent small mol. mimetics of **plasminogen** kringle 5 that inhibit HMVEC chemotaxis)

IT **679784-39-5**
RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(preparation of lysyl 4-aminobenzoic acid derivs. as potent small mol. mimetics of **plasminogen** kringle 5 that inhibit HMVEC chemotaxis)

IT 692-04-6 1155-64-2 2389-45-9 4530-20-5 6404-28-0 13795-73-8, L-Aspartic acid, bis(1,1-dimethylethyl) ester 18144-47-3, tert-Butyl 4-aminobenzoate 21887-64-9 156682-54-1, 3-(Benzyloxy)phenylboronic acid 250790-07-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of lysyl 4-aminobenzoic acid derivs. as potent small mol. mimetics of **plasminogen** kringle 5 that inhibit HMVEC chemotaxis)

IT 250790-08-0P 679784-40-8P 679784-41-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of lysyl 4-aminobenzoic acid derivs. as potent small mol. mimetics of **plasminogen** kringle 5 that inhibit HMVEC chemotaxis)

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
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L36 ANSWER 3 OF 13 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:448045 HCAPLUS
DN 139:30780
ED Entered STN: 11 Jun 2003
TI Methods and compositions for generating angiostatin
IN Soff, Gerald; Gately, Stephen T.; Twardowski, Przemyslaw
PA Northwestern University, USA
SO U.S., 46 pp., Cont.-in-part of U.S. Ser. No. 710,305.
CODEN: USXXAM
DT Patent
LA English
IC ICM A61K038-00

NCL 514012000; 435217000; 530350000; 530380000
CC 1-6 (Pharmacology)
Section cross-reference(s): 2
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	US 6576609	B1	20030610	US 1997-991761	19971216	<--
	US 5801012	A	19980901	US 1996-710305	19960917	
	WO 9815574	A1	19980416	WO 1997-US16539	19970917	<--

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

PRAI	US 1996-710305	A2	19960917	<--
	WO 1997-US16539	A1	19970917	

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES	
US 6576609	ICM	A61K038-00	
	NCL	514012000; 435217000; 530350000; 530380000	
US 6576609	ECLA	A61K038/16B1+M; A61K038/49+M; C12N009/68	<--
US 5801012	ECLA	A61K038/16B1+M; A61K038/49+M; C12N009/68	
WO 9815574	ECLA	A61K038/16B1+M; A61K038/49+M; C12N009/68	<--

AB The invention provides a method of treating a neoplastic disease in a human by administering a therapeutically effective amount of **plasminogen** activator effective to increase the amount of angiostatin present in the human to treat the disease. The invention also provides a method of treating a neoplastic disease in a human by administering a therapeutically effective amount of **plasminogen** activator and sulfhydryl donor effective to increase the amount of angiostatin present in the human to treat said disease.

ST angiostatin generation **plasminogen** activator sulfhydryl donor; neoplasm treatment angiostatin generation **plasminogen** activator

IT Sulfhydryl group
(donors; generating angiostatin using **plasminogen** activator and sulfhydryl donor to treat neoplastic disease)

IT **Angiogenesis inhibitors**
Antitumor agents
Drug interactions
Human
Neoplasm
(generating angiostatin using **plasminogen** activator and sulfhydryl donor to treat neoplastic disease)

IT **Angiogenesis**
(inhibition; generating angiostatin using **plasminogen** activator and sulfhydryl donor to treat neoplastic disease)

IT Neoplasm
(metastasis; generating angiostatin using **plasminogen** activator and sulfhydryl donor to treat neoplastic disease)

IT 354138-63-9 537677-42-2
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(angiostatin C-terminal sequence; generating angiostatin using **plasminogen** activator and sulfhydryl donor to treat neoplastic disease)

IT 337363-93-6 **354138-60-6** 354138-61-7
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(angiostatin N-terminal sequence; generating angiostatin using **plasminogen** activator and sulfhydryl donor to treat neoplastic disease)

IT 9001-90-5, Plasmin 9001-91-6, **Plasminogen**
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(angiostatin generation from; generating angiostatin using **plasminogen** activator and sulfhydryl donor to treat neoplastic disease)
IT 86090-08-6, Angiostatin
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(generating angiostatin using **plasminogen** activator and sulfhydryl donor to treat neoplastic disease)
IT 52-67-5, D-Penicillamine 52-90-4, Cysteine, biological studies 70-18-8, Reduced glutathione, biological studies 616-91-1, N-Acetylcysteine 9002-01-1, Streptokinase 9039-53-6, Urokinase 62571-86-2, Captopril 105913-11-9, **Plasminogen** activator 139639-23-9, Tissue **plasminogen** activator
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(generating angiostatin using **plasminogen** activator and sulfhydryl donor to treat neoplastic disease)
IT 541557-34-0 541557-35-1 541557-36-2 541557-37-3 541557-38-4 541557-39-5 541557-40-8
RL: PRP (Properties)
(unclaimed protein sequence; methods and compns. for generating angiostatin)
IT 53620-20-5 92662-83-4 541557-41-9
RL: PRP (Properties)
(unclaimed sequence; methods and compns. for generating angiostatin)
RE.CNT 86 THERE ARE 86 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
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L36 ANSWER 4 OF 13 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:261008 HCAPLUS
DN 138:281097
ED Entered STN: 04 Apr 2003
TI Angiostatin fragments and method of use
IN Folkman, M. Judah; O'Reilly, Michael S.; Cao, Yihai; Sim, Kim Lee
PA USA
SO U.S. Pat. Appl. Publ., 96 pp., Cont.-in-part of U.S. Ser. No. 335,325.

CODEN: USXXCO
DT Patent
LA English
IC ICM A61K038-22
NCL 514012000
CC 1-6 (Pharmacology)
Section cross-reference(s): 3, 16
FAN.CNT 6

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	US 2003064926	A1	20030403	US 2002-127066	20020422	<--
	US 5639725	A	19970617	US 1994-248629	19940426	<--
	US 5792845	A	19980811	US 1994-326785	19941020	<--
	US 5885795	A	19990323	US 1995-429743	19950426	<--
	US 5837682	A	19981117	US 1996-612788	19960308	<--
	US 5945403	A	19990831	US 1997-866735	19970530	
	US 6024688	A	20000215	US 1998-66028	19980424	<--
	US 2002164717	A1	20021107	US 1999-335325	19990617	<--
	US 6521439	B2	20030218			
	US 2002037847	A1	20020328	US 2001-761120	20010116	
	US 2001029246	A1	20011011	US 2001-788142	20010216	
	US 2004002459	A1	20040101	US 2003-402364	20030328	
PRAI	US 1994-248629	A2	19940426	<--		
	US 1994-326785	A2	19941020	<--		
	US 1995-429743	A2	19950426	<--		
	US 1996-612788	A3	19960308	<--		
	US 1997-866735	A3	19970530			
	US 1998-66028	A3	19980424			
	US 1999-309821	B1	19990511			
	US 1999-335325	A1	19990617			
	US 1999-338387	B1	19990622			
	US 2001-788142	A2	20010216			
	US 2001-761120	B1	20010116			

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES	
US 2003064926	ICM	A61K038-22	
	NCL	514012000	
US 2003064926	ECLA	C12N009/68; G01N033/574	<--
US 5639725	ECLA	C12N009/68; G01N033/574	<--
US 5792845	ECLA	C12N009/68; G01N033/574	<--
US 5885795	ECLA	C12N009/68; G01N033/574	<--
US 5837682	ECLA	C12N009/68	<--
US 5945403	ECLA	C12N009/68	
US 6024688	ECLA	C12N009/68	<--
US 2002164717	ECLA	C12N009/68	<--
US 2002037847	ECLA	C12N009/68	
US 2001029246	ECLA	C12N009/68	
US 2004002459	ECLA	C12N009/68	

AB Fragments of an endothelial cell proliferation inhibitor and method of use therefor are provided. The endothelial proliferation inhibitor is a protein derived from **plasminogen**, or more specifically is an angiostatin fragment. The angiostatin fragments generally correspond to kringle structures occurring within the endothelial cell proliferation inhibitor. The endothelial cell inhibiting activity of these fragments provides a means for inhibiting **angiogenesis** of tumors and for treating **angiogenic**-mediated disease. Angiostatin was cloned in Pichia pastoris and purified from fermentation broth by lysine-Sepharose 4B. The purified recombinant angiostatin inhibited the bFGF-driven proliferation of bovine endothelial cells in vitro in a dose dependent manner and suppressed metastases of Lewis lung carcinoma in mice.

ST angiostatin fragment endothelial cell proliferation inhibitor; **angiogenesis** inhibitor angiostatin fragment; antitumor angiostatin

fragment; metastasis Lewis lung carcinoma inhibition recombinant angiostatin

IT Disease, animal
(**angiogenesis**-mediated, treatment of; angiostatin fragments as endothelial cell proliferation and **angiogenesis** inhibitors)

IT Bos taurus
Human
Macaca mulatta
Mus
Sus scrofa domestica
(angiostatin fragment derived from **plasminogen** of; angiostatin fragments as endothelial cell proliferation and **angiogenesis** inhibitors)

IT **Angiogenesis**
Angiogenesis inhibitors
Antiarthritics
Antitumor agents
Apoptosis
Drug delivery systems
Gene therapy
Genetic vectors
Mammalia
Molecular cloning
Protein sequences
(angiostatin fragments as endothelial cell proliferation and **angiogenesis** inhibitors)

IT Blood serum
Urine
(angiostatin purification from; angiostatin fragments as endothelial cell proliferation and **angiogenesis** inhibitors)

IT Lung, neoplasm
Mammary gland, neoplasm
Prostate gland, neoplasm
(carcinoma; angiostatin fragments as endothelial cell proliferation and **angiogenesis** inhibitors)

IT Eye, disease
(diabetic retinopathy, treatment of; angiostatin fragments as endothelial cell proliferation and **angiogenesis** inhibitors)

IT Blood vessel
(endothelium, cell proliferation inhibitor; angiostatin fragments as endothelial cell proliferation and **angiogenesis** inhibitors)

IT Cell
(expressing angiostatin fragment; angiostatin fragments as endothelial cell proliferation and **angiogenesis** inhibitors)

IT Sarcoma
(fibrosarcoma; angiostatin fragments as endothelial cell proliferation and **angiogenesis** inhibitors)

IT DNA
Gene, animal
RL: BPN (Biosynthetic preparation); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(for angiostatin fragment inhibiting endothelial cell proliferation; angiostatin fragments as endothelial cell proliferation and **angiogenesis** inhibitors)

IT Escherichia coli
Pichia pastoris
(human angiostatin expression in; angiostatin fragments as endothelial cell proliferation and **angiogenesis** inhibitors)

IT Cell proliferation
(inhibition; angiostatin fragments as endothelial cell proliferation and **angiogenesis** inhibitors)

IT Protein motifs
(kringles; angiostatin fragments as endothelial cell proliferation and **angiogenesis** inhibitors)
IT Eye, disease
(macula, degeneration, treatment of; angiostatin fragments as endothelial cell proliferation and **angiogenesis** inhibitors)
IT Carcinoma
(mammary; angiostatin fragments as endothelial cell proliferation and **angiogenesis** inhibitors)
IT Neoplasm
(metastasis, inhibition of; angiostatin fragments as endothelial cell proliferation and **angiogenesis** inhibitors)
IT Lung, neoplasm
(metastasis; angiostatin fragments as endothelial cell proliferation and **angiogenesis** inhibitors)
IT Transformation, genetic
(of angiostatin fragment; angiostatin fragments as endothelial cell proliferation and **angiogenesis** inhibitors)
IT Carcinoma
(prostatic; angiostatin fragments as endothelial cell proliferation and **angiogenesis** inhibitors)
IT Carcinoma
(pulmonary; angiostatin fragments as endothelial cell proliferation and **angiogenesis** inhibitors)
IT Sarcoma
(reticulum cell; angiostatin fragments as endothelial cell proliferation and **angiogenesis** inhibitors)
IT Arthritis
Neoplasm
(treatment of; angiostatin fragments as endothelial cell proliferation and **angiogenesis** inhibitors)
IT Endothelium
(vascular, cell proliferation inhibitor; angiostatin fragments as endothelial cell proliferation and **angiogenesis** inhibitors)
IT **506450-14-2P**, **Plasminogen** (mouse kringle 1 fragment)
506450-15-3P, **Plasminogen** (human kringle 1 fragment)
506450-16-4P 506450-17-5P, **Plasminogen** (swine kringle 1 fragment) **506450-18-6P**, **Plasminogen** (cattle kringle 1 fragment) 506450-19-7P, **Plasminogen** (mouse kringle 2 fragment) 506450-20-0P, **Plasminogen** (human kringle 2 fragment) 506450-21-1P 506450-22-2P, **Plasminogen** (swine kringle 2 fragment) 506450-23-3P, **Plasminogen** (cattle kringle 2 fragment) 506450-24-4P, **Plasminogen** (mouse kringle 3 fragment) 506450-25-5P, **Plasminogen** (human kringle 3 fragment) 506450-26-6P 506450-27-7P, **Plasminogen** (swine kringle 3 fragment) 506450-28-8P, **Plasminogen** (cattle kringle 3 fragment) 506450-29-9P, **Plasminogen** (mouse kringle 4 fragment) 506450-30-2P, **Plasminogen** (human kringle 4 fragment) 506450-31-3P, **Plasminogen** (mouse kringle 2-3 fragment) 506450-32-4P, **Plasminogen** (human kringle 2-3 fragment) 506450-33-5P 506450-34-6P, **Plasminogen** (swine kringle 2-3 fragment) 506450-35-7P 506450-36-8P, **Plasminogen** (mouse kringle 1-3 fragment) 506450-37-9P, **Plasminogen** (human kringle 1-3 fragment) 506450-38-0P 506450-39-1P, **Plasminogen** (swine kringle 1-3 fragment) 506450-40-4P 506450-41-5P, **Plasminogen** (mouse kringle 1-2 fragment) 506450-42-6P, **Plasminogen** (human kringle 1-2 fragment) 506450-43-7P 506450-44-8P, **Plasminogen** (swine kringle 1-2 fragment) 506450-45-9P 506450-46-0P, **Plasminogen** (mouse kringle 1-4 fragment) 506450-47-1P, **Plasminogen** (human kringle 1-4 fragment) 506450-48-2P, **Plasminogen** (mouse kringle 1-4BKLS) 506450-49-3P, **Plasminogen** (human kringle 1-4BKLS)
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);

PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(amino acid sequence, as angiostatin fragment; angiostatin fragments as endothelial cell proliferation and **angiogenesis** inhibitors)

IT 506450-13-1, Angiostatin (Rhesus monkey) 506450-50-6, **Plasminogen** (mouse) 506450-51-7, Angiostatin (mouse) 506450-52-8, Angiostatin (human) 506450-53-9, Angiostatin (swine) 506450-54-0, Angiostatin (cattle)
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(amino acid sequence; angiostatin fragments as endothelial cell proliferation and **angiogenesis** inhibitors)

IT 9001-91-6, **Plasminogen**
RL: BSU (Biological study, unclassified); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent)
(angiostatin fragment derived from; angiostatin fragments as endothelial cell proliferation and **angiogenesis** inhibitors)

IT 86090-08-6P, Angiostatin
RL: BMF (Bioindustrial manufacture); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PAC (Pharmacological activity); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(angiostatin fragments as endothelial cell proliferation and **angiogenesis** inhibitors)

IT 9012-36-6D, Sepharose 4B, conjugates with lysine
RL: NUU (Other use, unclassified); USES (Uses)
(in angiostatin purification; angiostatin fragments as endothelial cell proliferation and **angiogenesis** inhibitors)

IT 506457-30-3 506457-31-4 506457-32-5
RL: PRP (Properties)
(unclaimed nucleotide sequence; angiostatin fragments and method of use)

IT 122580-21-6 506457-33-6
RL: PRP (Properties)
(unclaimed sequence; angiostatin fragments and method of use)

L36 ANSWER 5 OF 13 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:283962 HCAPLUS
DN 132:304929
ED Entered STN: 03 May 2000
TI Method of making mammalian kringle 5 peptide fragments with **angiogenesis** inhibitory effect by elastase proteolytic cleavage of **plasminogen**
IN **Davidson, Donald J.**
PA **Abbott Laboratories, USA**
SO U.S., 48 pp., Cont.-in-part of U.S. Ser. No. 832,087.
CODEN: USXXAM
DT Patent
LA English
IC ICM C12P021-06
ICS C07K001-00
NCL 435068100
CC 6-3 (General Biochemistry)
Section cross-reference(s): 1

FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6057122	A	20000502	US 1997-851350	19970505 <--
	US 5801146	A	19980901	US 1996-643219	19960503 <--
	US 5981484	A	19991109	US 1997-832087	19970403 <--
	US 6699838	B1	20040302	US 1997-924287	19970905 <--
	US 2004138127	A1	20040715	US 2004-753646	20040108 <--
PRAI	US 1996-643219	A2	19960503 <--		

US 1997-832087 A2 19970403
US 1997-851350 A2 19970505
US 1997-924287 A1 19970905

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES	
US 6057122	ICM	C12P021-06	
	ICS	C07K001-00	
	NCL	435068100	
US 6057122	ECLA	C12N009/68	<--
US 5801146	ECLA	C12N009/68	<--
US 5981484	ECLA	C12N009/68	<--
US 6699838	ECLA	C12N009/68	<--
US 2004138127	ECLA	C12N009/68	<--

AB A method of making mammalian kringle 5 peptide fragments corresponding to the 5th kringle domain of mammalian **plasminogen** and having **angiogenic** inhibitory effect is claimed. The method comprises exposing a mammalian **plasminogen** to elastase at a ratio of about 1:100 to 1:300 (weight/weight) and isolating kringle 5 fragments from the mixture

Kringle 5 peptide fragments were prepared either by porcine elastase proteolytic cleavage of Lys **plasminogen** or synthesized by standard solid phase Fmoc chemical The inhibition of bovine capillary endothelial cell proliferation and migration by kringle 5 peptide fragments was both potent and specific to the endothelial cells but not normal or tumor cells. Kringle 5 peptide fragments were also produced recombinantly in Pichia pastoris and E. coli.

ST elastase cleavage mammalian **plasminogen** kringle 5 peptide isolation; kringle 5 peptide sequence mammalian **plasminogen** **angiogenesis** inhibition

IT **Angiogenic factors**
Angiogenic factors
Growth inhibitors, animal
Growth inhibitors, animal

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)

(**angiogenic growth-inhibiting factors**; method of making mammalian kringle 5 peptide fragments with **angiogenesis** inhibitory effect by elastase proteolytic cleavage of **plasminogen**)

IT Blood vessel

(endothelium, proliferation and migration of, inhibition by kringle 5 peptide fragments; method of making mammalian kringle 5 peptide fragments with **angiogenesis** inhibitory effect by elastase proteolytic cleavage of **plasminogen**)

IT Escherichia coli
Komagataella pastoris

(expression host; method of making mammalian kringle 5 peptide fragments with **angiogenesis** inhibitory effect by elastase proteolytic cleavage of **plasminogen**)

IT Cell migration

(inhibitors, of bovine capillary endothelial cell; method of making mammalian kringle 5 peptide fragments with **angiogenesis** inhibitory effect by elastase proteolytic cleavage of **plasminogen**)

IT Protein motifs

(kringles; method of making mammalian kringle 5 peptide fragments with **angiogenesis** inhibitory effect by elastase proteolytic cleavage of **plasminogen**)

IT Peptides, biological studies

RL: BAC (Biological activity or effector, except adverse); BPR (Biological

process); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)
(method of making mammalian kringle 5 peptide fragments with **angiogenesis** inhibitory effect by elastase proteolytic cleavage of **plasminogen**)

IT Cytotoxic agents
(of bovine capillary endothelial cell; method of making mammalian kringle 5 peptide fragments with **angiogenesis** inhibitory effect by elastase proteolytic cleavage of **plasminogen**)

IT Protein sequences
(of human **plasminogen** fragments; method of making mammalian kringle 5 peptide fragments with **angiogenesis** inhibitory effect by elastase proteolytic cleavage of **plasminogen**)

IT Proliferation inhibition
(proliferation inhibitors, of bovine capillary endothelial cell; method of making mammalian kringle 5 peptide fragments with **angiogenesis** inhibitory effect by elastase proteolytic cleavage of **plasminogen**)

IT 9001-91-6D, Lys **plasminogen**, de-(1-76) derivs.
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(Lys **plasminogen**, kringle 5 peptide fragment source; method of making mammalian kringle 5 peptide fragments with **angiogenesis** inhibitory effect by elastase proteolytic cleavage of **plasminogen**)

IT **265110-89-2**
RL: PRP (Properties)
(Unclaimed; method of making mammalian kringle 5 peptide fragments with **angiogenesis** inhibitory effect by elastase proteolytic cleavage of **plasminogen**)

IT **250159-78-5D**, 443-543-**Plasminogen** (human), peptides
250159-79-6D, 449-543-**Plasminogen** (human), peptides
250159-80-9D, 454-543-**Plasminogen** (human), peptides
250159-81-0D, 443-546-**Plasminogen** (human), peptides
250159-83-2D, 449-546-**Plasminogen** (human), peptides
250159-84-3D, 454-546-**Plasminogen** (human), peptides
264868-26-0D, 355-543-**Plasminogen** (human), peptides
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(amino acid sequence; method of making mammalian kringle 5 peptide fragments with **angiogenesis** inhibitory effect by elastase proteolytic cleavage of **plasminogen**)

IT 109884-31-3, **Plasminogen** (human)
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(amino acid sequence; method of making mammalian kringle 5 peptide fragments with **angiogenesis** inhibitory effect by elastase proteolytic cleavage of **plasminogen**)

IT 9001-91-6, **Plasminogen**
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(method of making mammalian kringle 5 peptide fragments with **angiogenesis** inhibitory effect by elastase proteolytic cleavage of **plasminogen**)

IT 9004-06-2, Elastase
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(method of making mammalian kringle 5 peptide fragments with **angiogenesis** inhibitory effect by elastase proteolytic cleavage of **plasminogen**)

IT 199664-76-1P 199664-77-2P 199664-80-7P 199664-81-8P

199664-82-9P 199664-83-0P 199664-84-1P
199664-85-2P 199664-86-3P 199664-87-4P
199664-88-5P 199664-89-6P 199664-90-9P
199664-91-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(synthesis of, **antiangiogenic** kringle 5 peptide; method of making mammalian kringle 5 peptide fragments with **angiogenesis** inhibitory effect by elastase proteolytic cleavage of **plasminogen**)

IT 140088-37-5 265296-41-1, 22: PN: US6057122 SEQID: 5 unclaimed DNA 265296-42-2 265296-43-3 265296-44-4 265296-45-5 265296-46-6 265296-47-7 265296-52-4, 34: PN: US6057122 SEQID: 2 unclaimed DNA 265296-53-5, 35: PN: US6057122 SEQID: 3 unclaimed DNA 265296-54-6, 36: PN: US6057122 SEQID: 4 unclaimed DNA 265296-55-7, 37: PN: US6057122 SEQID: 7 unclaimed DNA 265296-56-8, 38: PN: US6057122 SEQID: 8 unclaimed DNA 265296-57-9, 39: PN: US6057122 SEQID: 9 unclaimed DNA 265296-58-0 265296-59-1 265296-60-4 265296-61-5 265296-62-6 265296-63-7 265296-64-8 265296-65-9 265296-66-0 265296-67-1 265296-68-2 265296-69-3 265296-70-6 265296-71-7, 1: PN: US6057122 FIGURE: 5 unclaimed DNA
RL: PRP (Properties)
(unclaimed nucleotide sequence; method of making mammalian kringle 5 peptide fragments with **angiogenesis** inhibitory effect by elastase proteolytic cleavage of **plasminogen**)

IT **265296-48-8 265296-49-9 265296-50-2**
265296-51-3 265317-31-5
RL: PRP (Properties)
(unclaimed protein sequence; method of making mammalian kringle 5 peptide fragments with **angiogenesis** inhibitory effect by elastase proteolytic cleavage of **plasminogen**)

RE.CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Anon; WO 9204450 1992 HCAPLUS
(2) Anon; WO 9529242 1995 HCAPLUS
(3) Anon; WO 9723500 1997 HCAPLUS
(4) Anon; SCRIP 1996, V2120, P21
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L36 ANSWER 6 OF 13 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1999:764061 HCAPLUS
DN 132:12510
ED Entered STN: 03 Dec 1999
TI Preparation of peptides as anti-angiogenic drugs to treat cancer, arthritis and retinopathy
IN Kawai, Megumi; Henkin, Jack; Sheppard, George S.; Craig, Richard A.
PA **Abbott Laboratories, USA**
SO PCT Int. Appl., 34 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C07K005-11
ICS C07K005-065
CC 34-3 (Amino Acids, Peptides, and Proteins)
Section cross-reference(s): 1
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9961466	A1	19991202	WO 1999-US11308	19990521
	W: CA, JP, MX				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	CA 2332772	AA	19991202	CA 1999-2332772	19990521
	EP 1077995	A1	20010228	EP 1999-925742	19990521
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
	JP 2002516337	T2	20020604	JP 2000-550870	19990521
PRAI	US 1998-83550	A	19980522		
	WO 1999-US11308	W	19990521		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 9961466	ICM	C07K005-11
	ICS	C07K005-065
WO 9961466	ECLA	C07K005/06A2+C; C07K005/10B

AB Peptides WNR1CR2R3CRARBNXCR4R5CRCRDNYCR6R7CRERFNZCR8R9CRGRHR10 [RARB, RCRD, RERF, or RGRH = H or :O; W, X, Y, Z = H, alkyl; R1 = H, protective group; R2, R3 = H, aminoalkyl; R4, R5 = H, alkyl, cycloalkyl; R6, R7 = H, alkyl, arylalkyl; R8, R9 = H, alkyl, carboxy- or carbalkoxyalkyl; R10 = OH, (un)substituted alkoxy, cycloalkoxy, NH2, (un)substituted alkylamino, cycloalkylamino] were prepared for treating pathol. states which arise from or are exacerbated by angiogenesis. Thus, (2S)-2-[[(2S)-2-[[(2S)-2-[[(2S)-2-(acetylamino)-6-aminohexanoyl]amino]-4-methylpentanoyl]methylamino]-3-phenylpropanoyl]amino]butanedioic acid was prepared and showed 83% inhibition at 10 NM against human microvascular endothelial cell migration.

ST peptide prepn angiogenesis inhibitor; antitumor treatment peptide prepn; antiarthritic peptide prepn; retinopathy treatment peptide prepn

IT Angiogenesis inhibitors
Antiarthritics
Antitumor agents
(preparation of peptides as anti-angiogenic drugs to treat cancer, arthritis and retinopathy)

IT Peptides, preparation
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of peptides as anti-angiogenic drugs to treat cancer, arthritis and retinopathy)

IT Eye, disease
(retinopathy; preparation of peptides as anti-angiogenic drugs to treat cancer, arthritis and retinopathy)
IT **251555-82-5P 251555-83-6P 251555-84-7P**
251555-85-8P 251555-86-9P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of peptides as anti-angiogenic drugs to treat cancer, arthritis and retinopathy)
IT 251555-87-0P 251555-88-1P 251555-89-2P 251555-90-5P
251555-91-6P 251555-92-7P 251555-93-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of peptides as anti-angiogenic drugs to treat cancer, arthritis and retinopathy)
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Abbott Lab; WO 9741824 A 1997 HCAPLUS
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L36 ANSWER 7 OF 13 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1999:718961 HCAPLUS
DN 131:346531
ED Entered STN: 11 Nov 1999
TI **antiangiogenic** kringle 5 peptide fragments of **plasminogen** for therapeutic control of **angiogenesis**
IN **Davidson, Donald J.**
PA **Abbott Laboratories, USA**
SO U.S., 40 pp., Cont.-in-part of U.S. 5,801,146.
CODEN: USXXAM
DT Patent
LA English
IC ICM A61K038-00
ICS A61K038-04
NCL 514012000
CC 1-8 (Pharmacology)
Section cross-reference(s): 14
FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	US 5981484	A	19991109	US 1997-832087	19970403	<--
	US 5801146	A	19980901	US 1996-643219	19960503	<--
	EP 910571	A2	19990428	EP 1997-925478	19970505	<--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI					
	CN 1223690	A	19990721	CN 1997-195989	19970505	<--
	BR 9708911	A	19990803	BR 1997-8911	19970505	<--
	US 6057122	A	20000502	US 1997-851350	19970505	<--
	NZ 332319	A	20000929	NZ 1997-332319	19970505	<--
	JP 2002502235	T2	20020122	JP 1997-540162	19970505	<--
	US 6699838	B1	20040302	US 1997-924287	19970905	<--
	US 5972896	A	19991026	US 1998-131995	19980811	<--
	US 6251867	B1	20010626	US 1998-132154	19980811	<--
	KR 2000010739	A	20000225	KR 1998-708851	19981103	<--
	US 2004138127	A1	20040715	US 2004-753646	20040108	<--
PRAI	US 1996-643219	A2	19960503	<--		
	US 1997-832087	A	19970403			
	US 1997-851350	A2	19970505			
	WO 1997-US7700	W	19970505			

Applicant

US 1997-924287 A1 19970905

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES	
US 5981484	ICM	A61K038-00	
	ICS	A61K038-04	
	NCL	514012000	
US 5981484	ECLA	C12N009/68	<--
US 5801146	ECLA	C12N009/68	<--
US 6057122	ECLA	C12N009/68	<--
US 6699838	ECLA	C12N009/68	<--
US 5972896	ECLA	C12N009/68	<--
US 6251867	ECLA	C12N009/68	<--
US 2004138127	ECLA	C12N009/68	<--

AB Mammalian kringle 5 peptide fragments that can inhibit **angiogenesis** are described for treating **angiogenic** diseases. Kringle 5 peptide fragments were manufactured either by proteolytic cleavage of **plasminogens** from various species or synthesized by standard FMOC chemical The inhibition of stimulated proliferation and migration by kringle 5 peptide fragments was both potent and specific to the bovine endothelial cells but not normal or tumor cells. Methods and compns. for inhibiting **angiogenic** diseases are also proposed.

ST kringle 5 peptide **plasminogen angiogenesis** treatment; **antiangiogenic** kringle 5 peptide **plasminogen**

IT **Angiogenesis inhibitors**
(**antiangiogenic** kringle 5 peptide fragments of **plasminogen** for therapeutic control of **angiogenesis**)

IT Antiarthritics
Antitumor agents
(**antiangiogenic plasminogen** kringle 5 domain peptides as, for inhibition of **angiogenesis**; **antiangiogenic** kringle 5 peptide fragments of **plasminogen** for therapeutic control of **angiogenesis**)

IT Eye, disease
(diabetic retinopathy, treatment of; **antiangiogenic** kringle 5 peptide fragments of **plasminogen** for therapeutic control of **angiogenesis**)

IT Blood vessel
(endothelium, proliferation inhibition by human kringle 5 peptide; **antiangiogenic** kringle 5 peptide fragments of **plasminogen** for therapeutic control of **angiogenesis**)

IT Protein sequences
(for **plasminogen** of human; **antiangiogenic** kringle 5 peptide fragments of **plasminogen** for therapeutic control of **angiogenesis**)

IT Blood vessel, neoplasm
Blood vessel, neoplasm
(hemangioma, inhibitors; **antiangiogenic** kringle 5 peptide fragments of **plasminogen** for therapeutic control of **angiogenesis**)

IT Antitumor agents
(hemangioma; **antiangiogenic** kringle 5 peptide fragments of **plasminogen** for therapeutic control of **angiogenesis**)

IT Protein motifs
(kringles, fragments of, human **plasminogen angiogenesis** inhibitors; **antiangiogenic** kringle 5 peptide fragments of **plasminogen** for therapeutic control of **angiogenesis**)

IT Antitumor agents
(lymphoma; **antiangiogenic** kringle 5 peptide fragments of **plasminogen** for therapeutic control of **angiogenesis**)

IT Eye, disease

(macula, degeneration, treatment of; **antiangiogenic** kringle 5 peptide fragments of **plasminogen** for therapeutic control of **angiogenesis**)

IT Cattle
Macaca mulatta
Mouse
Swine
(**plasminogen** kringle 5 domain peptides of, for inhibition of **angiogenesis**; **antiangiogenic** kringle 5 peptide fragments of **plasminogen** for therapeutic control of **angiogenesis**)

IT Antitumor agents
(sarcoma; **antiangiogenic** kringle 5 peptide fragments of **plasminogen** for therapeutic control of **angiogenesis**)

IT Psoriasis
(treatment of; **antiangiogenic** kringle 5 peptide fragments of **plasminogen** for therapeutic control of **angiogenesis**)

IT 109884-31-3D, **Plasminogen** (human liver clone pPLGKG protein moiety reduced), peptides **250159-78-5D**, 443-543-
Plasminogen (human), peptides **250159-79-6D**, 449-543-
Plasminogen (human), peptides **250159-80-9D**, 454-543-
Plasminogen (human), peptides **250159-81-0D**, 443-546-
Plasminogen (human), peptides **250159-83-2D**, 449-546-
Plasminogen (human), peptides **250159-84-3D**, 454-546-
Plasminogen (human), peptides
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(amino acid sequence; **antiangiogenic** kringle 5 peptide fragments of **plasminogen** for therapeutic control of **angiogenesis**)

IT 9001-91-6, **Plasminogen**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**antiangiogenic** peptides of; **antiangiogenic** kringle 5 peptide fragments of **plasminogen** for therapeutic control of **angiogenesis**)

IT 199664-76-1P 199664-77-2P 199664-80-7P 199664-81-8P
199664-82-9P 199664-83-0P 199664-84-1P
199664-85-2P 199664-86-3P 199664-87-4P
199664-88-5P 199664-89-6P 199664-90-9P
199664-91-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(synthesis of, **antiangiogenic** kringle 5 peptide; **antiangiogenic** kringle 5 peptide fragments of **plasminogen** for therapeutic control of **angiogenesis**)

IT 140088-37-5
RL: PRP (Properties)
(unclaimed nucleotide sequence; **antiangiogenic** kringle 5 peptide fragments of **plasminogen** for therapeutic control of **angiogenesis**)

IT 250163-83-8 250163-84-9 250163-85-0 **250163-86-1**
RL: PRP (Properties)
(unclaimed protein sequence; **antiangiogenic** kringle 5 peptide fragments of **plasminogen** for therapeutic control of **angiogenesis**)

RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
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(2) Anon; WO 9529242 1995 HCAPLUS
(3) Anon; WO 9723500 1997 HCAPLUS

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L36 ANSWER 8 OF 13 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1997:740418 HCAPLUS
DN 128:43873
ED Entered STN: 24 Nov 1997
TI **Antiangiogenic** peptides, polypeptides containing them, and methods for inhibiting **angiogenesis**
IN **Davidson, Donald J.**; **Wang, Jieyi**; **Gubbins, Earl J.**
PA **Abbott Laboratories, USA**
SO PCT Int. Appl., 78 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K
CC 1-12 (Pharmacology)
FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9741824	A2	19971113	WO 1997-US7700	19970505 <--
	WO 9741824	A3	19980108		
	W: AU, BR, CA, CN, CZ, HU, IL, JP, KR, MX, NZ				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 5801146	A	19980901	US 1996-643219	19960503 <--
	CA 2253243	AA	19971113	CA 1997-2253243	19970505 <--
	AU 9730606	A1	19971126	AU 1997-30606	19970505 <--
	AU 724077	B2	20000914		
	EP 910571	A2	19990428	EP 1997-925478	19970505 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
	CN 1223690	A	19990721	CN 1997-195989	19970505 <--
	BR 9708911	A	19990803	BR 1997-8911	19970505 <--
	NZ 332319	A	20000929	NZ 1997-332319	19970505 <--
	JP 2002502235	T2	20020122	JP 1997-540162	19970505 <--
PRAI	US 1996-643219	A	19960503	<--	
	US 1997-832087	A	19970403		

WO 1997-US7700 W 19970505

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES	
WO 9741824	ICM	A61K	
WO 9741824	ECLA	C12N009/68	<--
US 5801146	ECLA	C12N009/68	<--

AB Mammalian kringle 5 fragments and kringle 5 fusion proteins are disclosed as compds. for treating **angiogenic** diseases. Methods and compns. for inhibiting **angiogenic** diseases are also disclosed.

ST kringle 5 peptide **antiangiogenesis** sequence

IT **Angiogenic factors**
Angiogenic factors
Growth inhibitors, animal
Growth inhibitors, animal
RL: PEP (Physical, engineering or chemical process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(**angiogenic growth-inhibiting factors**; **antiangiogenic** peptides, polypeptides containing them, and methods for inhibiting **angiogenesis**)

IT **Angiogenesis inhibitors**
Antiarthritics
Antitumor agents
Escherichia coli
Gene therapy
Genetic vectors
Komagataella pastoris
Protein sequences
RNA sequences
cDNA sequences
(**antiangiogenic** peptides, polypeptides containing them, and methods for inhibiting **angiogenesis**)

IT Fusion proteins (chimeric proteins)
RL: BPN (Biosynthetic preparation); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(**antiangiogenic** peptides, polypeptides containing them, and methods for inhibiting **angiogenesis**)

IT Antitumor agents
(carcinoma; **antiangiogenic** peptides, polypeptides containing them, and methods for inhibiting **angiogenesis**)

IT Eye, disease
(diabetic retinopathy, inhibitors; **antiangiogenic** peptides, polypeptides containing them, and methods for inhibiting **angiogenesis**)

IT Blood vessel
(endothelium, migration of cells of; **antiangiogenic** peptides, polypeptides containing them, and methods for inhibiting **angiogenesis**)

IT Blood vessel, neoplasm
(hemangioma, inhibitors; **antiangiogenic** peptides, polypeptides containing them, and methods for inhibiting **angiogenesis**)

IT Psoriasis
(inhibitors; **antiangiogenic** peptides, polypeptides containing them, and methods for inhibiting **angiogenesis**)

IT Cattle
Macaca mulatta
Mouse
Swine
(kringle 5 fusion protein of; **antiangiogenic** peptides, polypeptides containing them, and methods for inhibiting **angiogenesis**)

IT Protein motifs

(kringles; **antiangiogenic** peptides, polypeptides containing them, and methods for inhibiting **angiogenesis**)
IT Antitumor agents
(lymphoma; **antiangiogenic** peptides, polypeptides containing them, and methods for inhibiting **angiogenesis**)
IT Eye, disease
(macula, degeneration, inhibitors; **antiangiogenic** peptides, polypeptides containing them, and methods for inhibiting **angiogenesis**)
IT Antitumor agents
(metastasis; **antiangiogenic** peptides, polypeptides containing them, and methods for inhibiting **angiogenesis**)
IT Cell migration
(of vascular endothelium; **antiangiogenic** peptides, polypeptides containing them, and methods for inhibiting **angiogenesis**)
IT Antitumor agents
(sarcoma; **antiangiogenic** peptides, polypeptides containing them, and methods for inhibiting **angiogenesis**)
IT 109884-31-3, **Plasminogen** (human liver clone pPLGKG protein moiety reduced)
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); OCCU (Occurrence)
(amino acid sequence; **antiangiogenic** peptides, polypeptides containing them, and methods for inhibiting **angiogenesis**)
IT 29022-11-5P 35661-39-3P 35661-40-6P 71989-26-9P 71989-28-1P 119831-72-0P 132388-59-1P 199664-76-1P 199664-77-2P 199664-80-7P 199664-81-8P **199664-82-9P 199664-83-0P 199664-84-1P 199664-85-2P 199664-86-3P 199664-87-4P 199664-88-5P 199664-89-6P 199664-90-9P 199664-91-0P**
RL: PNU (Preparation, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(**antiangiogenic** peptides, polypeptides containing them, and methods for inhibiting **angiogenesis**)
IT 35661-60-0 35737-15-6 68858-20-8 71989-14-5 71989-18-9 71989-23-6 71989-31-6 71989-33-8 71989-35-0 109425-51-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(**antiangiogenic** peptides, polypeptides containing them, and methods for inhibiting **angiogenesis**)
IT 9001-91-6, **Plasminogen**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(elastase treatment of; **antiangiogenic** peptides, polypeptides containing them, and methods for inhibiting **angiogenesis**)
IT 56-84-8, L-Aspartic acid, biological studies 56-87-1, Lysine, biological studies 60-18-4, Tyrosine, biological studies 61-90-5, L-Leucine, biological studies 63-91-2, Phenylalanine, biological studies 74-79-3, L-Arginine, biological studies
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(kringle peptide containing; **antiangiogenic** peptides, polypeptides containing them, and methods for inhibiting **angiogenesis**)
IT 9004-06-2, Elastase
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(**plasminogen** treatment with; **antiangiogenic** peptides, polypeptides containing them, and methods for inhibiting **angiogenesis**)

L36 ANSWER 9 OF 13 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1997:595457 HCAPLUS

DN 127:304391
ED Entered STN: 18 Sep 1997
TI Kringle 5 of **plasminogen** is a novel inhibitor of endothelial cell growth
AU Cao, Yihai; Chen, Andrew; An, Seong Soo A.; Ji, Richard-Weidong; **Davidson, Don**; Cao, Yumei; Llinas, Miguel
CS Laboratory of Angiogenesis Research, Department of Cell and Molecular Biology, Karolinska Institute, Stockholm, S-17177, Swed.
SO Journal of Biological Chemistry (1997), 272(36), 22924-22928
CODEN: JBCHA3; ISSN: 0021-9258
PB American Society for Biochemistry and Molecular Biology
DT Journal
LA English
CC 6-3 (General Biochemistry)
Section cross-reference(s): 13
AB Angiostatin is a potent angiogenesis inhibitor which has been identified as an internal fragment of **plasminogen** that includes its first four kringle modules. We have recently demonstrated that the anti-endothelial cell proliferative activity of angiostatin is also displayed by the first three kringle structures of **plasminogen** and marginally so by kringle 4 (Cao, Y., Ji, R.-W., Davidson, D., Schaller, J., Marti, D., Sohndel, S., McCance, S. G., O'Reilly, M. S., Llinas, M., and Folkman, J. (1996) J. Biol. Chemical 271, 29461-29467). We now report that the kringle 5 fragment of human **plasminogen** is a specific inhibitor for endothelial cell proliferation. Kringle 5 obtained as a proteolytic fragment of human **plasminogen** displays potent inhibitory effect on bovine capillary endothelial cells with a half-maximal concentration (ED50) of approx. 50 nM. Thus, kringle 5 would appear to be more potent than angiostatin on inhibition of basic fibroblast growth factor-stimulated capillary endothelial cell proliferation. Appropriately folded recombinant mouse kringle 5 protein, expressed in Escherichia coli, exhibits a comparable inhibitory effect as the proteolytic kringle 5 fragment. Thus, kringle 5 domain of human **plasminogen** is a novel endothelial inhibitor that is sufficiently potent to block the growth factor-stimulated endothelial cell growth.
ST kringle domain **plasminogen** endothelial cell growth
IT Blood vessel
(endothelium; kringle 5 of **plasminogen** is a novel inhibitor of endothelial cell growth)
IT Protein sequences
(kringle 5 of **plasminogen** is a novel inhibitor of endothelial cell growth)
IT Protein motifs
(kringles; kringle 5 of **plasminogen** is a novel inhibitor of endothelial cell growth)
IT **196417-08-0**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(amino acid sequence; kringle 5 of **plasminogen** is a novel inhibitor of endothelial cell growth)
IT 9001-91-6, **Plasminogen**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(kringle 5 of **plasminogen** is a novel inhibitor of endothelial cell growth)
RE.CNT 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD
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L36 ANSWER 10 OF 13 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1997:48745 HCAPLUS
DN 126:54861
ED Entered STN: 23 Jan 1997
TI Angiostatin krinkle region-containing fragment sequences, aggregate angiostatin, and tumor or **angiogenic**-mediated disease treatment
IN Folkman, M. Judah; O'Reilly, Michael S.; Cao, Yihai; Sim, Kim Lee; Lin, Jie
PA Children's Medical Center Corporation, USA
SO PCT Int. Appl., 212 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C12N
CC 1-6 (Pharmacology)
Section cross-reference(s): 6, 13
FAN.CNT 6

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9635774	A2	19961114	WO 1996-US5856	19960426 <--
WO 9635774	A3	19970213		

W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML

US 5885795	A	19990323	US 1995-429743	19950426	<--
US 5861372	A	19990119	US 1996-605598	19960222	<--
US 5837682	A	19981117	US 1996-612788	19960308	<--
AU 9655795	A1	19961129	AU 1996-55795	19960426	<--
AU 709633	B2	19990902			
EP 824546	A2	19980225	EP 1996-913208	19960426	<--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI					
JP 11508228	T2	19990721	JP 1996-534104	19960426	<--
BR 9608326	A	20000308	BR 1996-8326	19960426	<--
NZ 307044	A	20020301	NZ 1996-307044	19960426	<--
NO 9704943	A	19971218	NO 1997-4943	19971024	<--
PRAI US 1995-429743	A	19950426	<--		
US 1996-605598	A	19960222	<--		
US 1996-612788	A	19960308	<--		
US 1994-248629	A2	19940426	<--		
US 1994-326785	A2	19941020	<--		
WO 1996-US5856	W	19960426	<--		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES	
WO 9635774	ICM	C12N	
WO 9635774	ECLA	C12N009/68	<--
US 5885795	ECLA	C12N009/68; G01N033/574	<--
US 5861372	ECLA	C12N009/68	<--
US 5837682	ECLA	C12N009/68	<--

AB Fragments and an aggregate form of an endothelial cell proliferation inhibitor and methods of use therefor are provided. The endothelial proliferation inhibitor is a protein from **plasminogen**, or more specifically is an angiostatin fragment. The angiostatin fragments generally correspond to krinkle structures occurring within the endothelial cell proliferation inhibitor. Angiostatin is also prepared in a aggregate form. The endothelial cell inhibiting activity of the angiostatin fragments and the aggregate angiostatin provide a means for inhibiting **angiogenesis** of tumors and for treating **angiogenic**-mediated diseases.

ST angiostatin krinkle region sequence disease treatment; **angiogenesis** inhibitor angiostatin krinkle region sequence; aggregate angiostatin krinkle region disease treatment; tumor **angiogenesis** inhibition angiostatin krinkle region; **plasminogen** angiostatin fragment sequence disease treatment

IT Antitumor agents
Cattle
Macaca mulatta
Mouse
Protein sequences
Swine
(angiostatin krinkle region-containing fragment sequences, aggregate angiostatin, and tumor or **angiogenic**-mediated disease treatment)

IT Apoptosis
(angiostatin-stimulated; angiostatin krinkle region-containing fragment sequences, aggregate angiostatin, and tumor or **angiogenic**-mediated disease treatment)

IT Lung, neoplasm
(carcinoma, treatment; angiostatin krinkle region-containing fragment sequences, aggregate angiostatin, and tumor or **angiogenic**-mediated disease treatment)

IT Escherichia coli
Komagataella pastoris
(expression host; angiostatin krinkle region-containing fragment sequences, aggregate angiostatin, and tumor or **angiogenic**-mediated disease treatment)

IT Lung, neoplasm
(inhibitors; angiostatin krinkle region-containing fragment sequences, aggregate angiostatin, and tumor or **angiogenic**-mediated disease treatment)
IT Antitumor agents
(lung; angiostatin krinkle region-containing fragment sequences, aggregate angiostatin, and tumor or **angiogenic**-mediated disease treatment)
IT **122071-87-8**, 84-162-**Plasminogen** (human liver clone pPLGKG protein moiety reduced) **185074-38-8** 185074-39-9 185074-40-2 **185074-41-3** 185074-42-4 185074-43-5 185074-44-6 185074-45-7 185074-46-8 185074-47-9 185074-48-0 185074-49-1 185074-50-4 185074-51-5 185074-52-6 185074-53-7 185074-54-8 185074-55-9 185074-56-0 185074-57-1 185074-58-2 185074-59-3 185074-60-6 185074-61-7 185074-62-8 185074-63-9 185074-64-0 185074-65-1 185074-66-2 185074-67-3 185074-68-4 185074-69-5 185074-70-8 185074-71-9 185074-72-0
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(amino acid sequence; angiostatin krinkle region-containing fragment sequences, aggregate angiostatin, and tumor or **angiogenic**-mediated disease treatment)
IT 9001-91-6, **Plasminogen** 86090-08-6, Angiostatin 136653-77-5, **Plasminogen** (mouse) 172642-29-4, Angiostatin (mouse) 172642-30-7, Angiostatin (human) 172642-31-8, Angiostatin (Macaca mulatta) 172642-32-9, Angiostatin (pig) 172642-33-0, Angiostatin (ox)
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(angiostatin krinkle region-containing fragment sequences, aggregate angiostatin, and tumor or **angiogenic**-mediated disease treatment)

L36 ANSWER 11 OF 13 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1995:842649 HCAPLUS
DN 123:246823
ED Entered STN: 10 Oct 1995
TI Hydrophilic signal oligopeptides and methods of therapeutic use
IN Rath, Matthias
PA USA
SO PCT Int. Appl., 87 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM G01N033-531
CC 1-7 (Pharmacology)
Section cross-reference(s): 6, 7, 15
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9519568	A1	19950720	WO 1995-US575	19950112 <--
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW, MX, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US, UZ, VN				
RW: KE, MW, SD, SZ, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9516810	A1	19950801	AU 1995-16810	19950112 <--
EP 744027	A1	19961127	EP 1995-908522	19950112 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
AU 9881834	A1	19981008	AU 1998-81834	19980824 <--
AU 735298	B2	20010705		
US 2005014138	A1	20050120	US 2004-930300	20040830 <--

PRAI US 1994-182248 A 19940114 <--
WO 1995-US575 W 19950112 <--
US 1996-704499 B2 19960828 <--
US 1999-232186 B1 19990114
US 2001-881976 B3 20010615

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 9519568	ICM	G01N033-531

AB The instant invention is directed to a method of identifying signal oligopeptides through the use of algorithms, the use of signal oligopeptides as vaccines and as immunogens to produce antibodies. Like the human language, the protein code consists of letters, words, and sentences. The letters (amino acids) and sentences (complete 3-dimensional proteins) have been known previously, but the present discovery identifies the protein words or verbs. These protein verbs are represented by signal oligopeptides which are localized on the surface of the protein and are represented by the hydrophilicity maxima of the protein. These signal oligopeptides are enriched in charged amino acids in a versatile arrangement with neutral spacer amino acids. The sp. signal character of these oligopeptides is determined by a characteristic combination of conformation and charge within the signal sequence. Sas in human language, the whole sentence (complete 3-dimensional protein) is needed to determine the sp. and complete action of any given protein. In human language eliminating or changing the verb of a sentence renders the whole sentence meaningless. Similarly, blocking the protein code verbs (signal oligopeptides) can be therapeutically used to block the undesired action or interaction of an entire protein. The discovery of the protein code provides the rationale for deciphering the communication code of diseases. Infectious diseases, cancer, cardiovascular and other diseases develop by means of one or more pathogenicity-mediating protein. Blocking the signal oligopeptides of these proteins (e.g., with antibodies) allows the sp. therapeutic interception of a pathol. communication and thereby blocks disease propagation. Some 360 oligopeptides of signal significance are presented.

ST hydrophilic signal oligopeptide code sequence therapy; antibody signal oligopeptide sequence therapy

IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(ACTH-releasing factor-binding, signal fragments; hydrophilic signal oligopeptides and methods of therapeutic use)

IT Schistosoma
(elastase precursor of; hydrophilic signal oligopeptides and methods of therapeutic use)

IT Algorithm
(for signal peptide searching; hydrophilic signal oligopeptides and methods of therapeutic use)

IT Antibodies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(hydrophilic signal oligopeptide-binding; hydrophilic signal oligopeptides and methods of therapeutic use)

IT Acquired immune deficiency syndrome
Hydrophilicity
Therapeutics
(hydrophilic signal oligopeptides and methods of therapeutic use)

IT Treponema pallidum
(membrane protein TMPA of, signal fragments; hydrophilic signal oligopeptides and methods of therapeutic use)

IT Proteins, properties
RL: PRP (Properties)
(protein functional code; hydrophilic signal oligopeptides and methods

of therapeutic use)
IT Hepatitis
(δ antigen; hydrophilic signal oligopeptides and methods of therapeutic use)
IT Mental disorder
(Alzheimer's disease, amyloid A4; hydrophilic signal oligopeptides and methods of therapeutic use)
IT Glycoproteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(B, of herpes virus 1, signal fragments; hydrophilic signal oligopeptides and methods of therapeutic use)
IT Lipoproteins
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(Lp(a), apo-, human and rhesus, signal fragments; hydrophilic signal oligopeptides and methods of therapeutic use)
IT Antigens
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(TmpA (treponemal membrane protein A), of Treponema pallidum, signal fragments; hydrophilic signal oligopeptides and methods of therapeutic use)
IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(amyloid A4, Alzheimer, signal fragments; hydrophilic signal oligopeptides and methods of therapeutic use)
IT Lipoproteins
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(apo-, E, signal fragments; hydrophilic signal oligopeptides and methods of therapeutic use)
IT Phosphoproteins
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(gene rev, signal fragments; hydrophilic signal oligopeptides and methods of therapeutic use)
IT Virus, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(herpes simplex 1, signal fragments; hydrophilic signal oligopeptides and methods of therapeutic use)
IT Virus, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(herpes simplex 2, glycoprotein B of, signal fragments; hydrophilic signal oligopeptides and methods of therapeutic use)
IT Peptides, biological studies
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oligo-, hydrophilic signal oligopeptides and methods of therapeutic use)
IT 9001-12-1, Collagenase
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP

(Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(fibroblast MMP1, signal fragments; hydrophilic signal oligopeptides and methods of therapeutic use)

IT 99713-67-4 168690-08-2 168690-09-3 168690-10-6 168690-11-7
168690-12-8 168690-13-9 168690-14-0 168690-15-1 168690-16-2
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168692-40-8

RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(hydrophilic signal oligopeptides and methods of therapeutic use)

IT 168692-41-9 168692-42-0 168692-43-1 168692-44-2 168692-45-3
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168693-55-8 168693-56-9 168693-57-0
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(hydrophilic signal oligopeptides and methods of therapeutic use)

IT 80965-96-4, Elastase, prepro-
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(of Schistosoma, signal fragments; hydrophilic signal oligopeptides and methods of therapeutic use)

IT 9028-35-7, Hydroxymethylglutaryl coenzyme A reductase 39364-01-7, Prorenin 50812-36-7, Synthetase, farnesyl pyrophosphate 75432-63-2, Glucagon, prepro- 81690-22-4, Preprogastrin 106602-62-4, Islet amyloid polypeptide 113834-12-1, Schistosomin 123774-88-9, Gonadotropin-releasing factor, pro- 140208-23-7, **Plasminogen** activator inhibitor 1 142243-03-6, **Plasminogen** activator inhibitor 2
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(signal fragments; hydrophilic signal oligopeptides and methods of therapeutic use)

L36 ANSWER 12 OF 13 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1992:77826 HCAPLUS
DN 116:77826
ED Entered STN: 06 Mar 1992
TI Manufacture of fusion protein containing the kringle region of **plasminogen**
IN Yokoo, Yoshiharu; Sugimoto, Seiji; Sato, Moriyuki; Nishi, Tatsuya; Ito, Seiga
PA Kyowa Hakko Kogyo Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 18 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C12P021-02
ICS C07K003-10; C07K003-20; C07K007-10; C07K013-00
ICA C12N015-62; C12P021-06
ICI C12P021-02, C12R001-19; C07K099-00
CC 3-4 (Biochemical Genetics)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 03219892	A2	19910927	JP 1990-13941	19900124 <--
PRAI	JP 1990-13941		19900124 <--		

CLASS PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 03219892	ICM	C12P021-02
	ICS	C07K003-10; C07K003-20; C07K007-10; C07K013-00
	ICA	C12N015-62; C12P021-06
	ICI	C12P021-02, C12R001-19; C07K099-00

AB Manufacture of the kringle region 1 (k1) of **plasminogen** and/or a heterologous protein via the expression of a chimeric gene thereof is described. K1 and the adjacent protein, e.g. the B domain of protein A domain (I) of Staphylococcus aureus, are linked with an amino acid/peptide linker that can be easily cleaved by a chemical/enzymic treatment for separation and purification A histidine residue can also be introduced into the protein as chelating sites. Plasmids pPrKT1 and pPZKT1 encoding the fusion protein of k1-I and k1-I derivative, resp., for expression in Escherichia coli were given. Purifn, of the fusion protein with lysine-affinity chromatog. was also shown.

ST kringle 1 **plasminogen** fusion protein; protein A **plasminogen** kringle 1

IT Animal cell
Escherichia coli
(expression in, of chimeric gene for human **plasminogen** kringle 1 and Staphylococcus aureus)

IT Microorganism
(expression in, of chimeric gene for human **plasminogen** kringle 1 and Staphylococcus aureus protein A B domain)

IT Plasmid and Episome
(pPZKT1, chimeric gene for human **plasminogen** kringle 1 and Staphylococcus aureus protein A B domain on,)

IT Plasmid and Episome
(pPrKT1, chimeric gene for human **plasminogen** kringle 1 and Staphylococcus aureus protein A B domain on,)

IT Proteins, specific or class
RL: BIOL (Biological study)
(A, B domain, fusion products with kringle 1 of **plasminogen** of, recombinant manufacture of)

IT 91931-07-6, 212-269-Protein A (Staphylococcus aureus clone pAC37)
138726-05-3, 80-165-**Plasminogen** (human liver clone pPLGKG protein moiety reduced)
RL: PRP (Properties)
(amino acid sequence of, fusion protein containing)

IT 71-00-1, Histidine, biological studies
RL: BIOL (Biological study)
(chelating site, in fusion protein containing plaminogen kringle 1 and B domain of protein A)

IT 56-87-1, Lysine, analysis
RL: ANST (Analytical study)
(kringle 1 carboxyl terminus of **plasminogen** containing, purification by affinity chromatog. of)

IT 9001-91-6P, **Plasminogen**
RL: PREP (Preparation)
(kringle 1 domain of, fusion products with B domain of protein A and, recombinant preparation of)

L36 ANSWER 13 OF 13 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1989:491713 HCAPLUS
DN 111:91713
ED Entered STN: 16 Sep 1989
TI Manufacture of tissue **plasminogen** activator analogs by recombinant DNA technology
IN Mulvihill, Eileen R.; Nexo, Bjorn A.; Yoshitake, Shinji; Ikeda, Yasunori; Suzuki, Suguru; Hashimoto, Akira; Yuzuriha, Teruaki

PA Zymogenetics, Inc., USA; Novo Industri A/S; Eisai Co., Ltd.
SO Eur. Pat. Appl., 54 pp.
CODEN: EPXXDW
DT Patent
LA English
IC ICM C12N009-50
ICS C12N015-00; C07H021-04; C12N005-00; A61K037-54
ICI C12N005-00, C12R001-19
CC 3-4 (Biochemical Genetics)
Section cross-reference(s): 13, 63
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	EP 293934	A1	19881207	EP 1988-108949	19880603	<--
	EP 293934	B1	19940831			
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE					
	FI 8802628	A	19881205	FI 1988-2628	19880603	<--
	NO 8802453	A	19881205	NO 1988-2453	19880603	<--
	NO 179754	B	19960902			
	NO 179754	C	19961211			
	DK 8803022	A	19890203	DK 1988-3022	19880603	<--
	ZA 8803958	A	19890726	ZA 1988-3958	19880603	<--
	ES 2058180	T3	19941101	ES 1988-108949	19880603	<--
	JP 01085078	A2	19890330	JP 1988-138232	19880604	<--
	JP 04048433	B4	19920806			
	KR 9705251	B1	19970414	KR 1988-6716	19880604	<--
	AU 8817410	A1	19881208	AU 1988-17410	19880606	<--
	AU 617323	B2	19911128			
	US 5149533	A	19920922	US 1991-747452	19910812	<--
PRAI	US 1987-58217	A	19870604	<--		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES	
EP 293934	ICM	C12N009-50	
	ICS	C12N015-00; C07H021-04; C12N005-00; A61K037-54	
	ICI	C12N005-00, C12R001-19	
EP 293934	ECLA	C12N009/72B	<--

AB Tissue **plasminogen** activator (t-PA) analogs which exhibit greater specificity for fibrin than native t-PA are disclosed. Native t-PA contains 2 triple disulfide-bonded regions, the kringle domains K1 and K2, which participate in the binding of t-PA to fibrin. In this invention, the K1 domain of native t-PA is replaced with that from another source. The t-PA analogs may further include a variety of substitutions and modifications. A cDNA comprising the coding sequence for native human t-PA was constructed from an mRNA isolated from the Bowes melanoma cell line. This cDNA was then used to construct the plasmid pDR1296. Because the prepro-sequence of t-PA was not present in pDR1296, it was constructed from synthesized oligonucleotides and subsequently joined to the cDNA in the vector Zem99. Here the complete t-PA coding sequence was sandwiched between a metallothionein I promoter and a human growth hormone terminator. The K1 domain of **plasminogen** was constructed from 11 oligonucleotides and was then inserted into the t-PA cDNA as a replacement for the K1 domain of t-PA. The resultant plasmid, Zem99-8000, was used to transform E. coli.

ST tissue **plasminogen** activator mutation; human tissue **plasminogen** activator gene cloning
IT Mammal
(cloning in cells of, of tissue **plasminogen** activator analog gene of human)
IT Escherichia coli
(cloning in, of tissue **plasminogen** activator analog gene of human)
IT Gene and Genetic element, animal

RL: BIOL (Biological study)
(for tissue **plasminogen** activator analog, of human)

IT Protein sequences
(of kringle domain for human tissue **plasminogen** activator analog)

IT Molecular cloning
(of tissue **plasminogen** activator analog gene, of human)

IT Protein sequences
(of tissue **plasminogen** activator native and variants forms, of human, complete)

IT Fibrins
RL: BIOL (Biological study)
(tissue **plasminogen** activator of human with enhanced binding to, construction of)

IT Proteins, specific or class
RL: PRP (Properties)
(C, growth factor domain of, in tissue **plasminogen** activator analog of human)

IT Plasmid and Episome
(Zem99, tissue **plasminogen** activator gene of human on, for site-specific mutagenesis)

IT Plasmid and Episome
(Zem99-8000, tissue **plasminogen** activator analog gene of human on)

IT Plasmid and Episome
(Zem99-8100, tissue **plasminogen** activator analog gene of human on)

IT Plasmid and Episome
(pDR1296, tissue **plasminogen** activator gene of human on, cloning of, in Escherichia coli)

IT Deoxyribonucleic acid sequences
(plasmin-specifying, kringle domain)

IT Mutation
(site-specific, of tissue **plasminogen** activator, of human, for enhanced binding to fibrin)

IT Deoxyribonucleic acid sequences
(tissue-type **plasminogen** activator-specifying, native and variant forms, of human, complete)

IT 122007-78-7 122007-79-8 122007-80-1 122007-81-2 122007-82-3
122007-83-4 122007-84-5 122007-85-6
RL: PRP (Properties)
(amino acid sequence of)

IT 84933-03-9, **Plasminogen** activator (human tissue-type precursor protein moiety reduced) 84933-04-0, **Plasminogen** activator (human tissue-type protein moiety reduced)
RL: PRP (Properties)
(amino acid sequence of, preparation of analogs of)

IT **122071-87-8**, 84-162-**Plasminogen** (human liver clone pPLGKG protein moiety reduced)
RL: PRP (Properties)
(amino acid sequence of, recombinant tissue **plasminogen** activator containing)

IT 122071-58-3 122071-59-4 122071-60-7 122071-61-8 122071-62-9
122071-63-0 122071-64-1 122092-15-3 122092-16-4
RL: PRP (Properties)
(as finger domain of human tissue **plasminogen** activator analog)

IT **122071-86-7**
RL: PRP (Properties)
(as kringle domain for human tissue **plasminogen** activator analog)

IT 9001-25-6, Blood-coagulation factor VII 9001-28-9, Factor IX
9001-29-0, Factor X

RL: PRP (Properties)
(growth factor domain of, in tissue **plasminogen** activator analog of human)
IT 9001-26-7, Prothrombin 9001-30-3, Blood-coagulation factor XII
9001-91-6, **Plasminogen**
RL: PRP (Properties)
(kringle domain of, substitution of, for that of human tissue **plasminogen** activator)
IT 122006-81-9 122006-82-0, Deoxyribonucleic acid (human clone Zem94 tissue-type **plasminogen** activator messenger RNA-complementary)
122006-83-1 122006-86-4 122006-87-5 122006-88-6 122006-89-7
RL: PRP (Properties); BIOL (Biological study)
(nucleotide sequence of)
IT 105913-11-9, **Plasminogen** activator
RL: PRP (Properties)
(tissue-type, of human, replacement of kringle domain of, for enhanced binding to fibrin)

=> fil reg
FILE 'REGISTRY' ENTERED AT 14:01:47 ON 15 FEB 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 14 FEB 2005 HIGHEST RN 831169-46-1
DICTIONARY FILE UPDATES: 14 FEB 2005 HIGHEST RN 831169-46-1

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

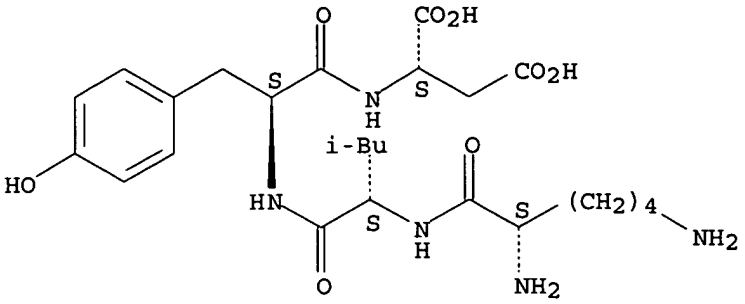
Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

=> => d browse l38
:1-51

L38 ANSWER 1 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
RN **679784-39-5** REGISTRY
CN L-Aspartic acid, L-lysyl-L-leucyl-L-tyrosyl- (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
MF C25 H39 N5 O8
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Journal
RL.NP Roles from non-patents: BIOL (Biological study); PRP (Properties); USES (Uses)

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.



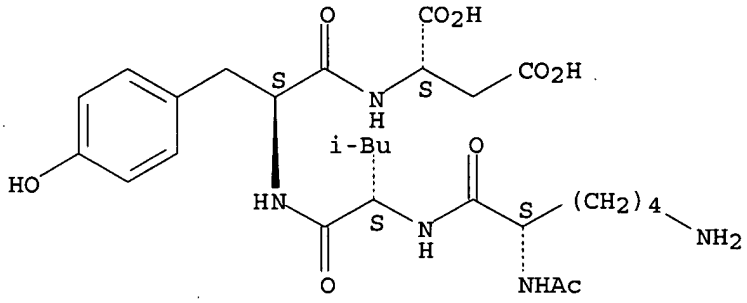
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L38 ANSWER 2 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
RN **679784-35-1** REGISTRY
CN L-Aspartic acid, N2-acetyl-L-lysyl-L-leucyl-L-tyrosyl- (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
MF C27 H41 N5 O9
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Journal
RL.NP Roles from non-patents: BIOL (Biological study); PREP (Preparation); PRP (Properties); USES (Uses)

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.



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1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L38 ANSWER 3 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
RN **666870-39-9** REGISTRY
CN 38: PN: US6699838 SEQID: 38 unclaimed protein (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
*** USE 'SQD' OR 'SQIDE' FORMATS TO DISPLAY SEQUENCE ***
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1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L38 ANSWER 4 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
RN **666870-38-8** REGISTRY
CN 37: PN: US6699838 SEQID: 37 unclaimed protein (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)

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1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L38 ANSWER 5 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
RN **666870-37-7** REGISTRY
CN 36: PN: US6699838 SEQID: 36 unclaimed protein (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)

RELATED SEQUENCES AVAILABLE WITH SEQLINK

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1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L38 ANSWER 6 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
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CN 35: PN: US6699838 SEQID: 35 unclaimed protein (9CI) (CA INDEX NAME)
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MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)

RELATED SEQUENCES AVAILABLE WITH SEQLINK

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1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L38 ANSWER 7 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
RN **666870-35-5** REGISTRY
CN 34: PN: US6699838 SEQID: 34 unclaimed protein (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)

RELATED SEQUENCES AVAILABLE WITH SEQLINK

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1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L38 ANSWER 8 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
RN **666867-41-0** REGISTRY
CN Peptide, (Pro-Arg-Lys-Leu-Tyr-Asp-Xaa) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 18: PN: US6699838 SEQID: 18 claimed protein
FS PROTEIN SEQUENCE
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); PRP (Properties); USES (Uses)

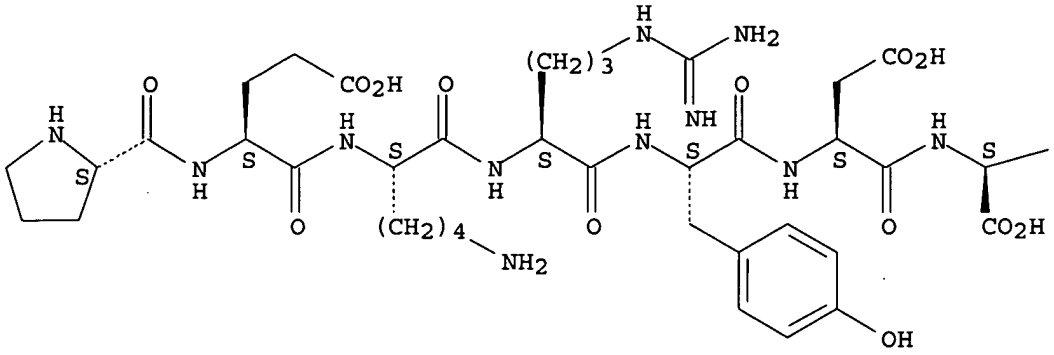
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
*** USE 'SQD' OR 'SQIDE' FORMATS TO DISPLAY SEQUENCE ***
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L38 ANSWER 9 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
RN **666829-12-5** REGISTRY
CN L-Tyrosine, L-prolyl-L-α-glutamyl-L-lysyl-L-arginyl-L-tyrosyl-L-α-aspartyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 39: PN: US6699838 SEQID: 39 claimed sequence
FS PROTEIN SEQUENCE; STEREOSEARCH
MF C44 H63 N11 O14
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); PRP (Properties); USES (Uses)

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.

PAGE 1-A



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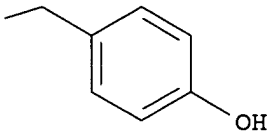

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L38 ANSWER 10 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
RN **506450-18-6** REGISTRY
CN Plasminogen (cattle kringle 1 fragment) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 13: PN: US20030064926 SEQID: 11 claimed protein
FS PROTEIN SEQUENCE
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent.
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); PRP (Properties); USES (Uses)

RELATED SEQUENCES AVAILABLE WITH SEQLINK

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
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1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L38 ANSWER 11 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
RN **506450-15-3** REGISTRY
CN Plasminogen (human kringle 1 fragment) (9CI) (CA INDEX NAME)

OTHER NAMES:
CN 10: PN: US20030064926 SEQID: 8 claimed protein
FS PROTEIN SEQUENCE
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); PRP (Properties); USES (Uses)

RELATED SEQUENCES AVAILABLE WITH SEQLINK

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1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L38 ANSWER 12 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
RN **506450-14-2** REGISTRY
CN Plasminogen (mouse kringle 1 fragment) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 9: PN: US20030064926 SEQID: 7 claimed protein
FS PROTEIN SEQUENCE
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); PRP (Properties); USES (Uses)

RELATED SEQUENCES AVAILABLE WITH SEQLINK

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
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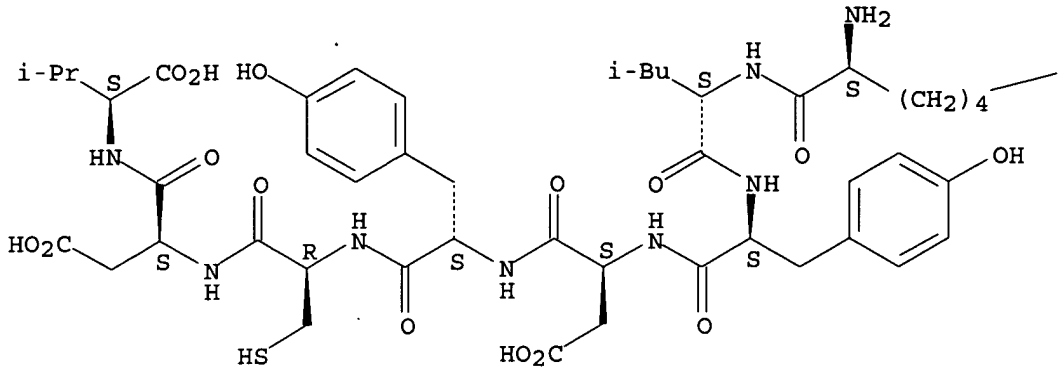
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L38 ANSWER 13 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
RN **354138-60-6** REGISTRY
CN L-Valine, L-lysyl-L-leucyl-L-tyrosyl-L-α-aspartyl-L-tyrosyl-L-cysteinyl-L-α-aspartyl- (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
MF C46 H67 N9 O15 S
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); OCCU (Occurrence); PRP (Properties)

Absolute stereochemistry.

PAGE 1-A



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2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L38 ANSWER 14 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
RN **265296-51-3** REGISTRY
CN 33: PN: US6057122 SEQID: 38 unclaimed protein (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)

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1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L38 ANSWER 15 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
RN **265296-50-2** REGISTRY
CN 32: PN: US6057122 SEQID: 37 unclaimed protein (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)

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1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L38 ANSWER 16 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
RN **265296-49-9** REGISTRY
CN 31: PN: US6057122 SEQID: 36 unclaimed protein (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)

RELATED SEQUENCES AVAILABLE WITH SEQLINK

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1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L38 ANSWER 17 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
RN **265296-48-8** REGISTRY
CN 30: PN: US6057122 SEQID: 35 unclaimed protein (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)

RELATED SEQUENCES AVAILABLE WITH SEQLINK

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*** USE 'SQD' OR 'SQIDE' FORMATS TO DISPLAY SEQUENCE ***
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L38 ANSWER 18 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
RN **265110-89-2** REGISTRY
CN L-Tyrosine, L-prolyl-L-arginyl-L-lysyl-L-leucyl-L-tyrosyl-L-α-aspartyl- (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
MF C45 H67 N11 O12
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
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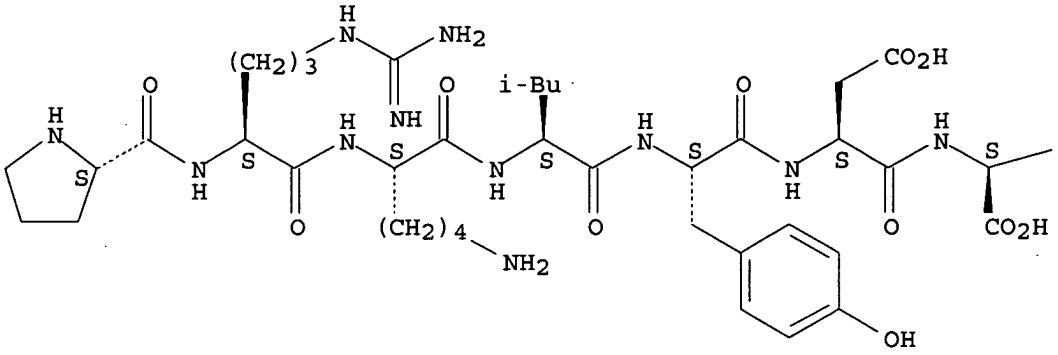
RL.P Roles from patents: PRP (Properties)

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.

PAGE 1-A



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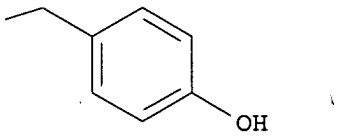

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L38 ANSWER 19 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
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CN 355-543-Plasminogen (human) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 7: PN: US6057122 TABLE: 1 claimed protein
FS PROTEIN SEQUENCE
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
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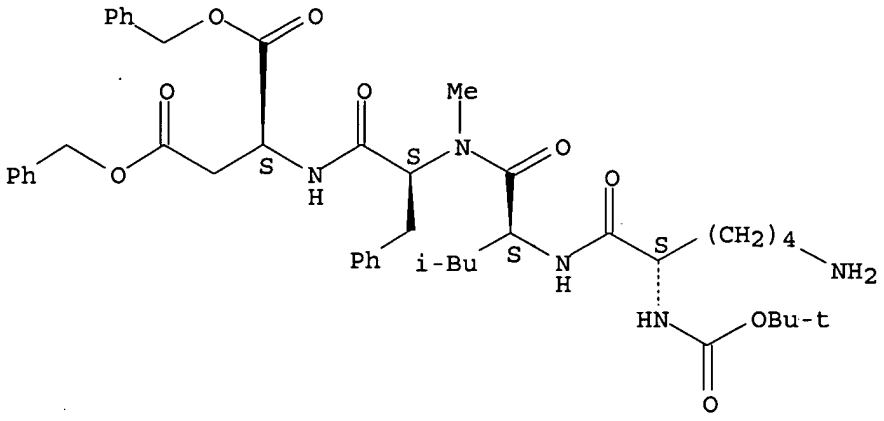
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L38 ANSWER 20 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
RN **251555-93-8** REGISTRY
CN L-Aspartic acid, N2-[(1,1-dimethylethoxy)carbonyl]-L-lysyl-L-leucyl-N-methyl-L-phenylalanyl-, bis(phenylmethyl) ester (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
MF C45 H61 N5 O9
SR CA

LC STN Files: CA, CAPLUS, TOXCENTER
DT.CA CAplus document type: Patent
RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.



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L38 ANSWER 21 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
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CN L-α-Asparagine, N6-[(phenylmethoxy)carbonyl]-L-lysyl-L-leucyl-N-methyl-O-(phenylmethyl)-L-tyrosyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
MF C45 H62 N6 O9
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER
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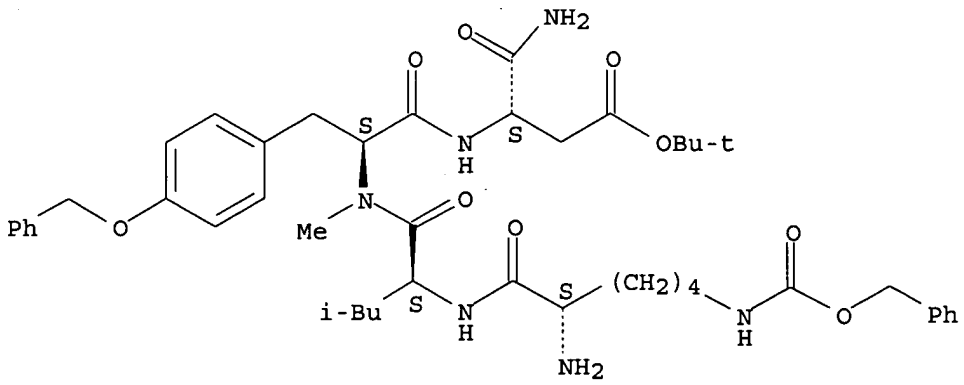
Absolute stereochemistry.



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L38 ANSWER 22 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
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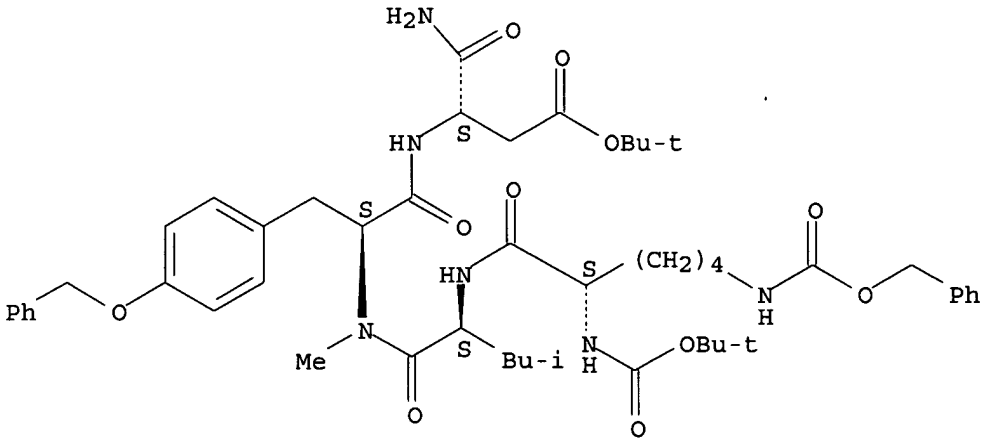
FS PROTEIN SEQUENCE; STEREOSEARCH
MF C50 H70 N6 O11
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER
DT.CA CAplus document type: Patent
RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.



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L38 ANSWER 23 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
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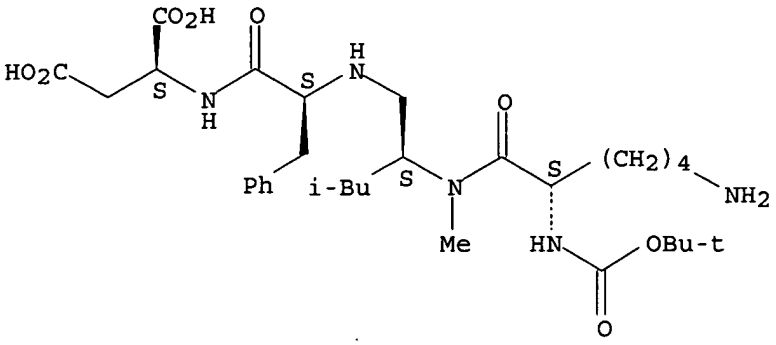
RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L38 ANSWER 24 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
RN **251555-85-8** REGISTRY
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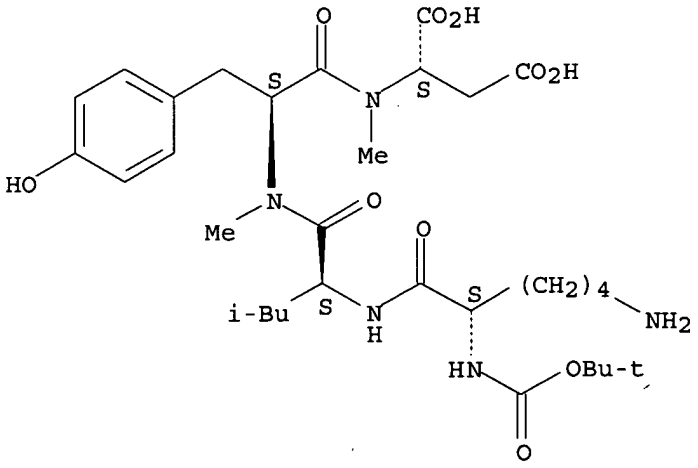
FS PROTEIN SEQUENCE; STEREOSEARCH
MF C32 H51 N5 O10
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.



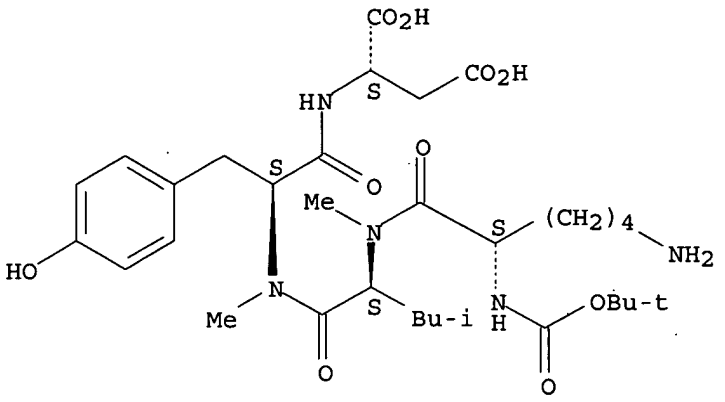
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L38 ANSWER 25 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
RN **251555-84-7** REGISTRY
CN L-Aspartic acid, N2-[(1,1-dimethylethoxy)carbonyl]-L-lysyl-N-methyl-L-leucyl-N-methyl-L-tyrosyl- (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH

MF C32 H51 N5 O10
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.

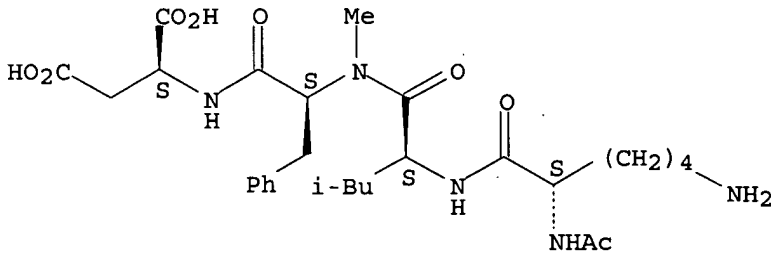


1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L38 ANSWER 26 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
RN **251555-83-6** REGISTRY
CN L-Aspartic acid, N2-acetyl-L-lysyl-L-leucyl-N-methyl-L-phenylalanyl- (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
MF C28 H43 N5 O8
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.



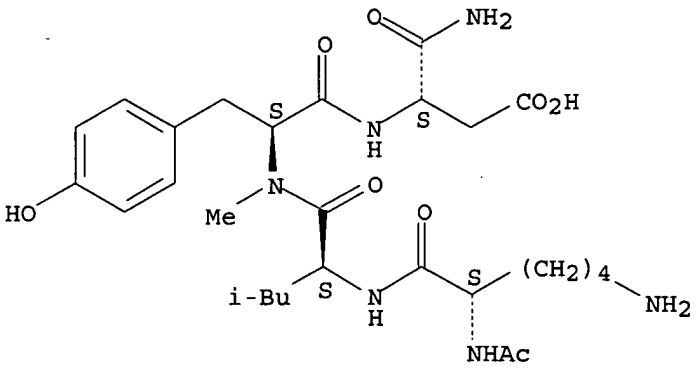
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L38 ANSWER 27 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
RN **251555-82-5** REGISTRY
CN L-α-Asparagine, N2-acetyl-L-lysyl-L-leucyl-N-methyl-L-tyrosyl- (9CI)

(CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
MF C28 H44 N6 O8
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.



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L38 ANSWER 28 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
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FS PROTEIN SEQUENCE
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
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1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L38 ANSWER 29 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
RN **250159-84-3** REGISTRY
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FS PROTEIN SEQUENCE
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CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); PROC (Process); PRP (Properties); USES (Uses)

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L38 ANSWER 30 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
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DT.CA CAplus document type: Patent
RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); PROC (Process); PRP (Properties); USES (Uses)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
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2 REFERENCES IN FILE CA (1907 TO DATE)
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L38 ANSWER 31 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
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DT.CA CAplus document type: Patent
RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); PROC (Process); PRP (Properties); USES (Uses)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
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L38 ANSWER 32 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
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MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); PROC (Process); PRP (Properties); USES (Uses)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

*** USE 'SQD' OR 'SQIDE' FORMATS TO DISPLAY SEQUENCE ***
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2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L38 ANSWER 33 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
RN **250159-79-6** REGISTRY
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OTHER NAMES:
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FS PROTEIN SEQUENCE
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CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); PROC (Process); PRP (Properties); USES (Uses)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
*** USE 'SQD' OR 'SQIDE' FORMATS TO DISPLAY SEQUENCE ***
2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
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L38 ANSWER 34 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
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CI MAN
SR CA
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DT.CA CAplus document type: Patent
RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); PROC (Process); PRP (Properties); USES (Uses)

RELATED SEQUENCES AVAILABLE WITH SEQLINK

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
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2 REFERENCES IN FILE CA (1907 TO DATE)
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2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L38 ANSWER 35 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
RN **199664-91-0** REGISTRY
CN L-Tyrosinamide, 1-acetyl-L-prolyl-L-arginyl-L-lysyl-L-leucyl-3-(iodo-125I)-L-tyrosyl-L-α-aspartyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 21: PN: US6057122 PAGE: 39/40 claimed protein
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LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); PRP (Properties); USES (Uses)

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.

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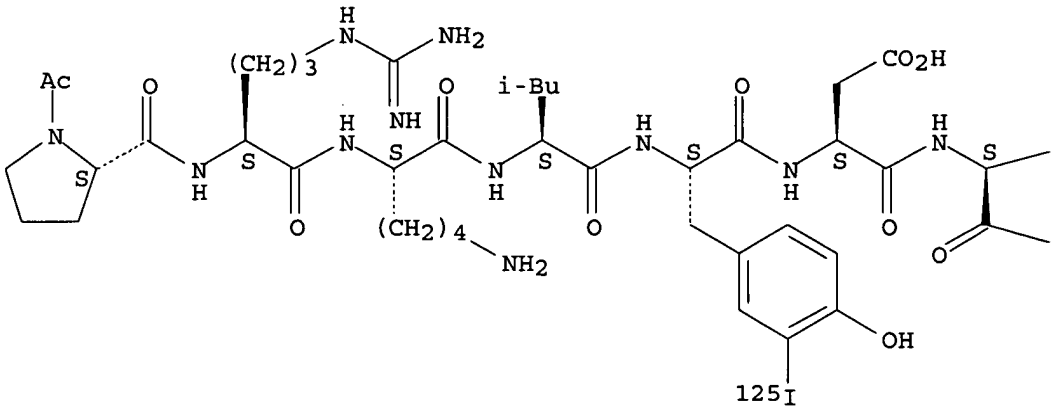

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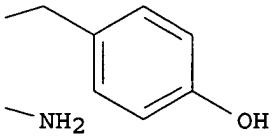

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L38 ANSWER 36 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
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CN L-Tyrosinamide, 1-acetyl-L-prolyl-L-arginyl-L-lysyl-L-leucyl-L-tyrosyl-L-α-aspartyl-3-(iodo-125I)- (9CI) (CA INDEX NAME)
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RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.

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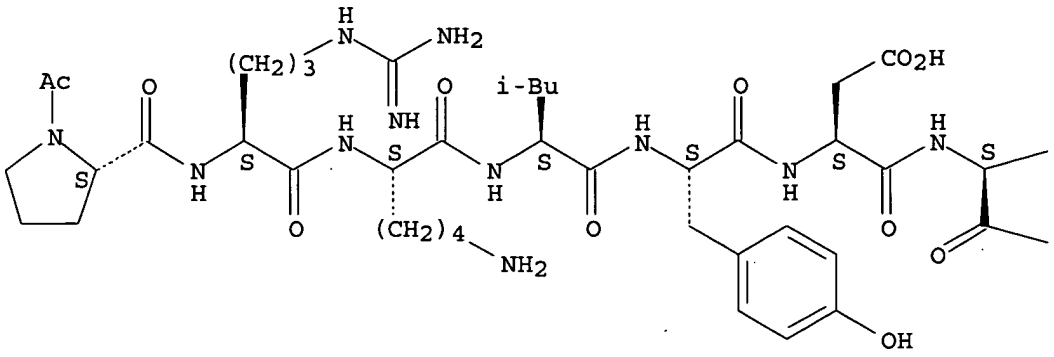

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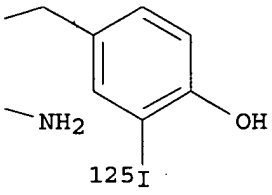

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L38 ANSWER 37 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
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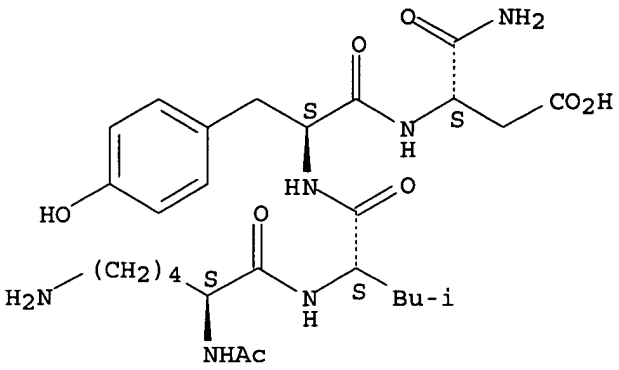
RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.



3 REFERENCES IN FILE CA (1907 TO DATE)
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L38 ANSWER 38 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
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RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.

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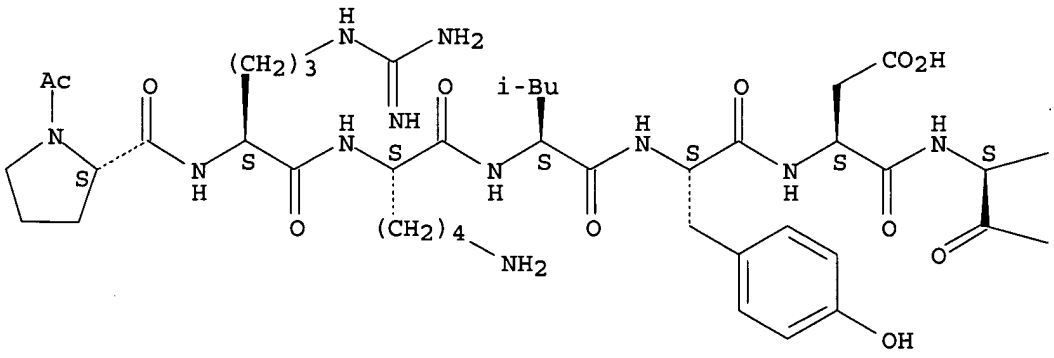

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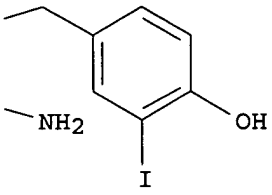

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RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.

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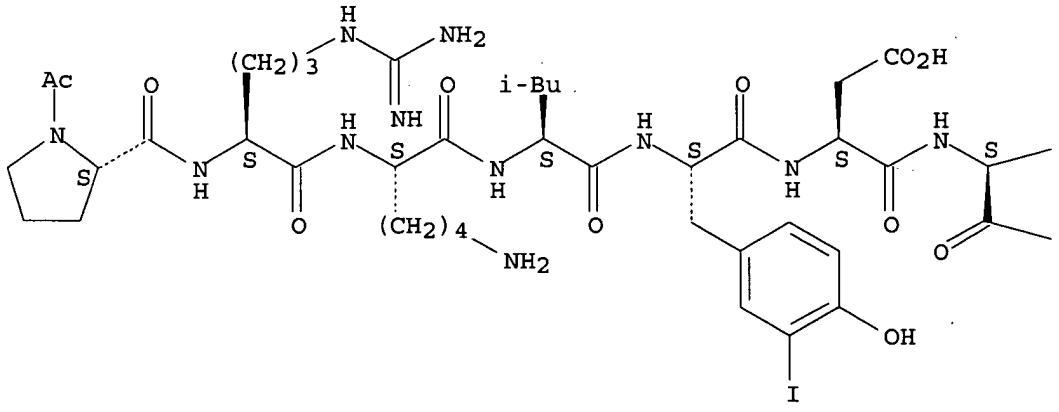

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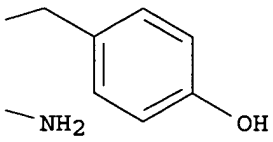

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L38 ANSWER 40 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
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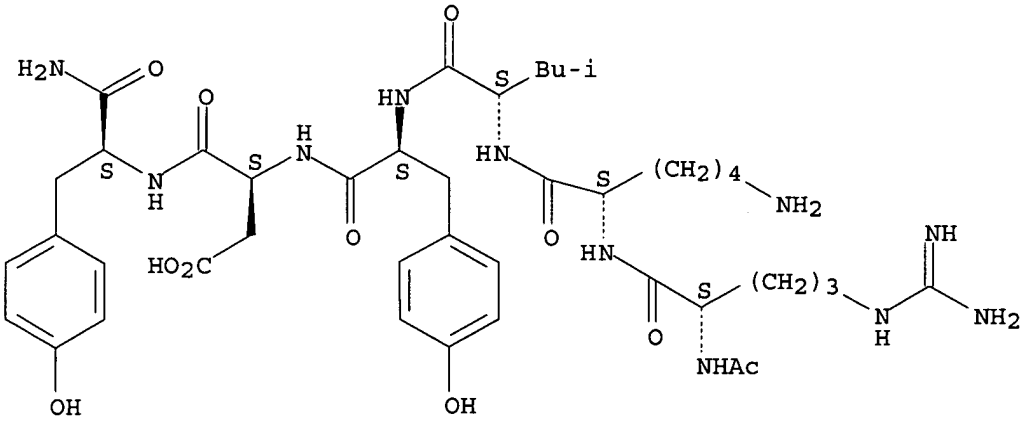
RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.



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L38 ANSWER 41 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
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MF C46 H66 N12 O14
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RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.

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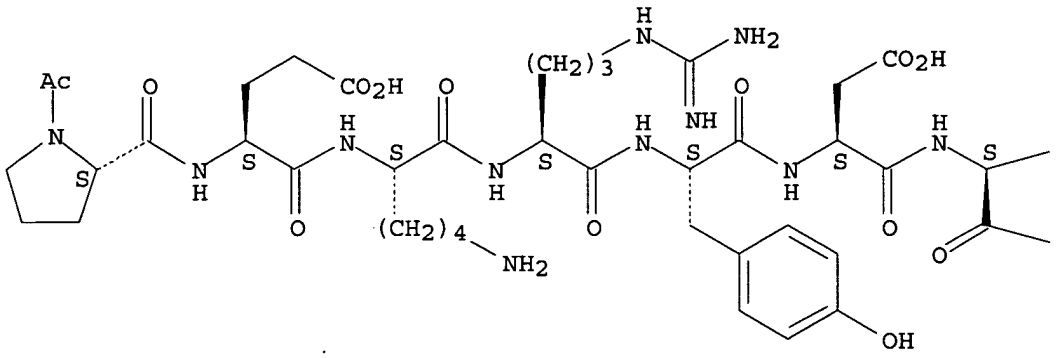

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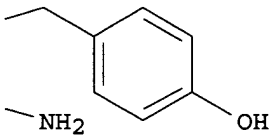

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L38 ANSWER 42 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
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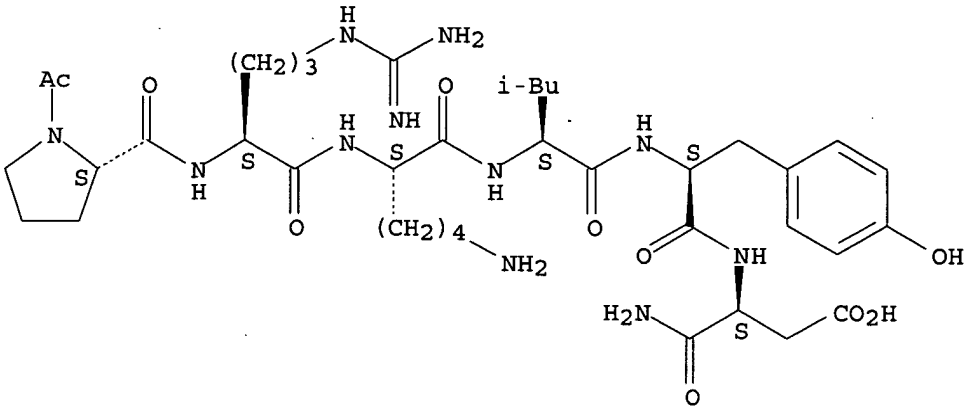
RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.



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L38 ANSWER 43 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
RN **199664-83-0** REGISTRY
CN L-Tyrosinamide, 1-acetyl-L-prolyl-L-arginyl-L-lysyl-L-leucyl-L-tyrosyl-L-α-aspartyl- (9CI) (CA INDEX NAME)
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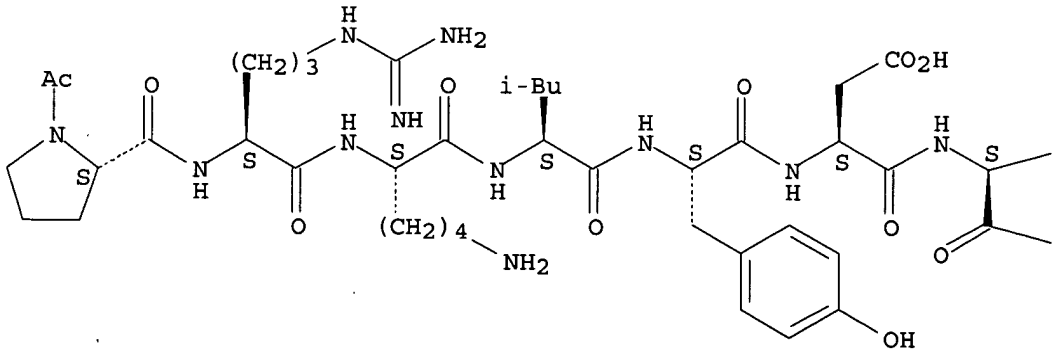
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); PRP (Properties); USES (Uses)
RL.NP Roles from non-patents: BIOL (Biological study); PREP (Preparation); PRP (Properties)

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.

PAGE 1-A



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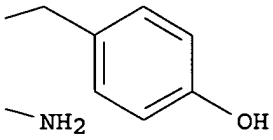

4 REFERENCES IN FILE CA (1907 TO DATE)
4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L38 ANSWER 44 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
RN **199664-82-9** REGISTRY
CN L-Tyrosinamide, N-acetyl-L-tyrosyl-L-threonyl-L-threonyl-L-asparaginyl-L-prolyl-L-arginyl-L-lysyl-L-leucyl-L-tyrosyl-L-α-aspartyl- (9CI) (CA INDEX NAME)
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FS PROTEIN SEQUENCE; STEREOSEARCH
MF C68 H99 N17 O20
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); PRP (Properties); USES (Uses)
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RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.

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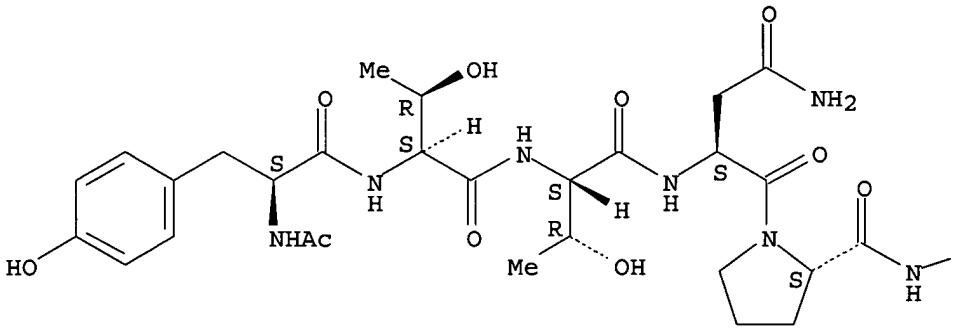

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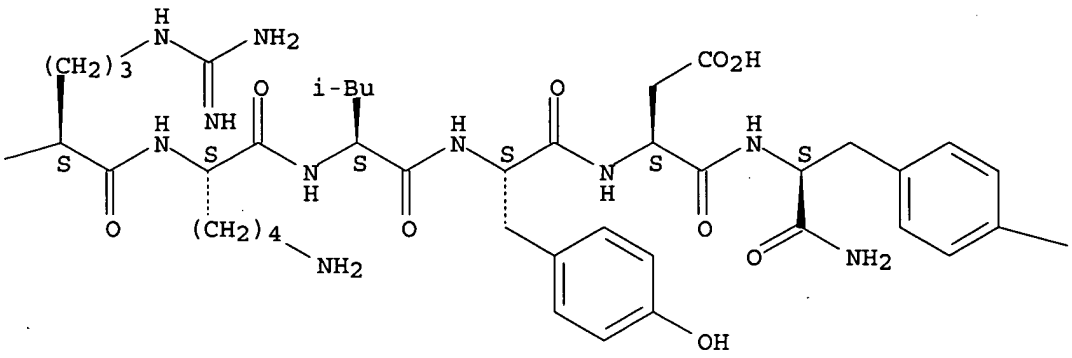

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L38 ANSWER 45 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
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FS PROTEIN SEQUENCE
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Journal
RL.NP Roles from non-patents: BIOL (Biological study); PROC (Process); PRP (Properties)

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2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L38 ANSWER 46 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
RN **185074-41-3** REGISTRY
CN Angiostatin (cattle krinkle 1 region-contg. fragment) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Angiostatin (ox krinkle 1 region-contg. fragment)
FS PROTEIN SEQUENCE
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PRP (Properties); USES (Uses)

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1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L38 ANSWER 47 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
RN **185074-38-8** REGISTRY
CN Angiostatin (mouse krinkle 1 region-contg. fragment) (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PRP (Properties); USES (Uses)

RELATED SEQUENCES AVAILABLE WITH SEQLINK

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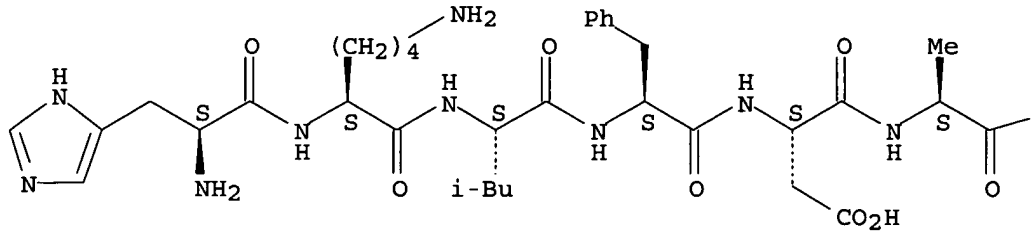
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

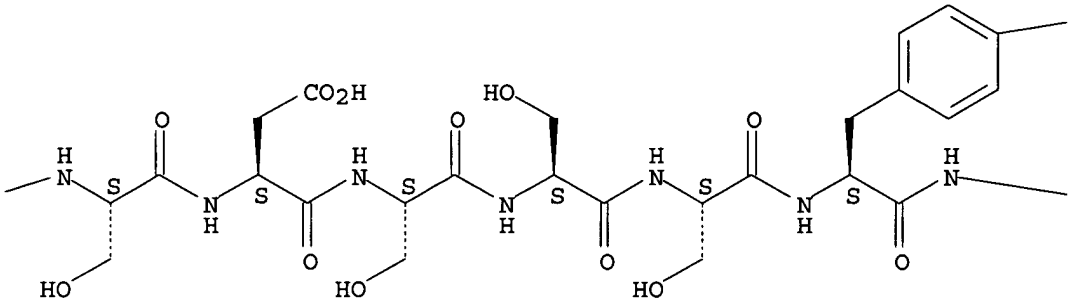
L38 ANSWER 48 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
RN **168693-32-1** REGISTRY
CN L-Histidine, L-histidyl-L-lysyl-L-leucyl-L-phenylalanyl-L-α-aspartyl-L-alanyl-L-seryl-L-α-aspartyl-L-seryl-L-seryl-L-seryl-L-tyrosyl-L-lysyl- (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
MF C71 H104 N20 O24
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); OCCU (Occurrence); PRP (Properties); USES (Uses)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



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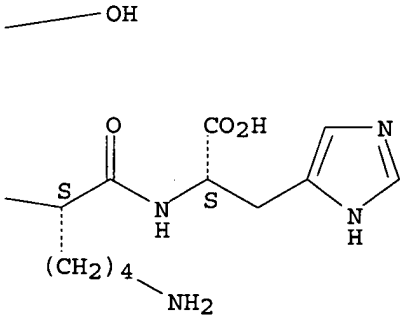

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L38 ANSWER 49 OF 51 REGISTRY COPYRIGHT 2005 ACS on STN
RN **138726-05-3** REGISTRY
CN 80-165-Plasminogen (human liver clone pPLGKG protein moiety reduced) (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE
MF C423 H635 N121 O144 S7
CI MAN
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)

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               1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L38  ANSWER 50 OF 51  REGISTRY  COPYRIGHT 2005 ACS on STN
RN   122071-87-8  REGISTRY
CN   84-162-Plasminogen (human liver clone pPLGKG protein moiety reduced) (9CI)
     (CA INDEX NAME)
OTHER NAMES:
CN   78-156-Plasminogen (human kringle 1 domain-containing fragment)
CN   Angiostatin (human krinkle 1 region-contg. fragment)
FS   PROTEIN SEQUENCE
MF   C385 H582 N114 O127 S7
CI   MAN
SR   CA
LC   STN Files:   CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA  CAplus document type:  Journal; Patent
RL.P   Roles from patents:  BIOL (Biological study); PRP (Properties); USES
       (Uses)
RL.NP  Roles from non-patents:  BIOL (Biological study); PREP (Preparation);
       PROC (Process)

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               3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L38  ANSWER 51 OF 51  REGISTRY  COPYRIGHT 2005 ACS on STN
RN   122071-86-7  REGISTRY
CN   84-162-Plasminogen (human liver clone pPLGKG protein moiety reduced),
     88-L-aspartic acid- (9CI)  (CA INDEX NAME)
FS   PROTEIN SEQUENCE
MF   C385 H581 N113 O128 S7
CI   MAN
SR   CA
LC   STN Files:   CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA  CAplus document type:  Patent
RL.P   Roles from patents:  PRP (Properties)

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